ROCKS AND MINERALS

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Mineralogy
•
Geology
•
Lapidary

Basal Silicon Crystals
Rattlesnake Butte, South Dakota
Photo by Geo H. Pickens, Jr.
(see page 194)

60c

May-June, 1959
Whole Number 270

NINTH ANNUAL CONVENTION

Gem and Mineral Show

Eastern Federation of Mineralogical and Lapidary Societies

Sheraton Plaza Hotel, Boston, Massachusetts

JULY 16, 17, and 18, 1959

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ROCKS & MINERALS

PETER ZODAC, Editor and Publisher

America's Oldest and Most Versatile Magazine for the Mineralogist, Geologist, Lapidary.

Published Bi-Monthly

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GEOLOGY & MINERALOGY. Underlying gneissic rocks in the immediate area have been described as "garnetiferous biotite gneiss" (Ref. 1), but from their locally weak nature and decided foliation some portions may be more aptly described as schists. The firmer gneiss consists principally of biotite mica, feldspar, and quartz combined in granulitic texture. Streaks and traces of foliation are common, especially next to the segregations or eyes (augen) of adularescent orthoclase which are generally completely enveloped in foliated, greenish altered mica. In other places streaks of garnet-rich rock occur in which this mineral forms pea-size aggregates of light red garnet showing no traces of crystal form. Streaks of rude, bladed kyanite crystals, mainly colorless with pale blue centers, are also common. Kyanite crystals range from small splintery individuals to some which are as much as 1½" in length. Loose crystals are abundant in lower layers of gravel along with garnet masses. Although close attention was paid to gravel contents, no other remarkable minerals were found except a single squarish fragment of steel-gray rutile. Gravel consists largely of well-rounded quartzitic pebbles, partly-rounded glassy quartz fragments, some quite transparent, pebbles of gneiss, feldspar, kyanite, garnet, and some scales of mica. The presence of glassy quartz upstream points to the existence of weathered pegmatites lying beneath the thick mantle of soil and some distance removed from those already discovered and worked for mica.

Because the small creek upon the Harris property falls rather rapidly in its upper reaches, it has cut through the thick mantle of soil to bedrock leaving a cross-section of the first exposed to view and broad surfaces of the latter visible at many points along the creek bed. Although the soil overburden ranges from two to six feet in depth only a layer a few inches to a foot thick along the bottom is occupied by gravel. The remainder comprises thin layers of blue clay, sand, yellow clay, and soil impregnated with organic matter. At several points where depressions formed in bed rock. all gradations from firm unaltered gneiss to friable soil still retaining the structure of gneiss were to be seen.

Fortunately, the exact nature of the moonstone occurrence was well exposed some distance upstream from the mica mine workings where at a small waterfall a large eye of adularescent feldspar of about 24" in length and 6" maximum depth was found in the side of the bank. The form was that of a teardrop with the long axis parallel to the bedding of the gneiss. Well-defined structure within the eye was apparent, the central portion consisting of a much-fractured mass of translucent orthoclase surrounded by a sheath of cloudy worthless material in which were imbedded rounded nodules of granular quartz associated with greenish mica (probably muscovite). At the contact with the enclosing rock, the grain size diminished to a sugary texture. Although relatively straight-grained elsewhere, the gneiss for an inch or so surrounding the eye followed its contours forming an envelope of foliated dark green mica-rich material. Smaller eyes exposed upon the creek bed indicate that the feldspar and its associated quartz are much more resistant to decay than the enclosing rock for the latter is sometimes worn away to leave the eyes standing in relief. The composition and internal structure of each eye corresponds in all essentials to a granitic pegmatite and each may be regarded as a miniature pegmatite body. Readers having access to Reference 2 in which the moonstone deposits of Ceylon are briefly described will be struck by the similarity of the Harris Farm deposit to those of Ceylon. There seems little question that both have been formed the same way in almost identical rock formations.

The extent of the moonstone-bearing gneiss is unknown but it may well underlie considerable portions of the surrounding woodland, especially along the general trend of all rocks in the

Appalachian Province, that is, from northeast to southwest. In this connection it is of interest to note that gneiss exposures strike across the creek bed at angles of about 30° and contain moonstone eyes for at least several hundred yards thus establishing a minimum width of the formation as several hundred feet *in the immediate area.* However, the width is certainly greater for moonstone fragments were found several hundred yards further upstream from the last rock exposures in the creek bed. Exploration in the vicinity of the Harris Farm to establish the presence or absence of similar rock formations should be directed to the east and west as well as to the north across the Little River but in view of the mature, deeply-weathered nature of the terrain, very little gravel will be exposed except in the small side creeks which enter the Little River from both north and south. Although the existence of moonstone has been proven only in one small area as described above, considerable moonstone-bearing gravel apparently paves the bottom of the ravine through which the creek flows and requires only systematic washing operations to recover if commercial demand develops. As it stands now, additional supplies are released to the gravels by spring freshets every year which undercut and topple the steep banks although the quantity provided in this way cannot be very large.

Very little work has been done upon this orthoclase except to establish its identity. Polished samples tested upon a Rayner refractometer furnished indices and birefringences close to published values for orthoclase moonstone from other localities. The clearest and purest specimens exhibit a perfect, easily-developed cleavage which is presumed to be that corresponding to *c* (001); another slightly less perfect but much more difficultly developed cleavage is noted at right angles to the first and is therefore presumed to lie parallel to *b* (010). Cabochons carefully cut to show adularescence upon their crowns were tested under crossed polaroids and proved through numerous trials that the plane of adularescence lies athwart the acute bisetrix. This was shown by the appearance of sharp biaxial figures, one on either side of the cabochon when the latter was examined in polarized light. This plane is therefore normal to *b* (010) and inclined about 20° to *c* (001). Since the orientation of any moonstone rough prior to cutting is ordinarily a rather difficult matter, this knowledge may be of some assistance to the lapidary if he first carefully examines rough specimens to determine which of the cleavages is which.

The diaphaneity of the Harris Farm moonstone is most remarkable. In the direction vertical to the plane of adularescence just described, almost no impedance to the passage of light is offered and newsprint can be read clearly through a polished section of one-quarter inch or better. On the other hand, at any direction at right angles to this, a similar thickness of polished material permits only a milky glow of light to pass. Apparently numerous microscopic inclusions or differences in internal structure responsible for the adularescent effect are rodlike or platey in nature, and are oriented in parallel edgewise to the plane of adularescence. A secondary but very sparse group of similar inclusions must exist in some of the moonstone for one polished cabochon displayed a noticeable sheen along opposite ends of the girdle. This double display is sometimes noted in Ceylon moonstones and commonly in the orthoclase moonstone recently placed on the market from some locality in India. If pronounced, reflections from the secondary set cross those from the first and enable the skillful lapidary to cut "star" moonstones.

Aside from the usual microscopic inclusions responsible for the sheen of moonstone, the Harris Farm material at times contains easily visible "snowflake" inclusions similar to those observed in Ceylon material. Each consists of several crossed cleavage disks from which emanate numerous minute spike-like branches forming right angles to each other.

In color, material so far recovered is predominantly faintly greenish or yellowish but shows color distinctly only when placed upon dead-white paper. Large rough pieces are noticeably colored of course. Some small fragments of absolutely colorless material have been found also and are virtually indistinguishable from Ceylon material but unfortunately they seem to be very much in the minority. In size, clear gem material sometimes is found in cleavage fragments an inch or more across but seldom without a number of partly-developed cleavage separations. The largest unflawed gem cut by the author measures only ¾" across. Much larger masses are found in the gravels but almost invariably these are cloudy, much fractured pieces virtually worthless for any decorative purpose. In some instances however, small solid pieces which appear to be only slightly translucent contain cores of clear gem material within, the exterior merely being a thin skin of orthoclase altering into an unknown white powdery opaque mineral which may be kaolin.

There is little likelihood that the orthoclase moonstone described in this article will displace Ceylon moonstone unless material of better color and stronger sheen is found. The high degree of diaphaneity of the Harris Farm material indicates that adularescence-causing inclusions are far less abundant than in oriental material and therefore account for the less decided sheen. Unlike the oriental material which can be cut into relatively high-crowned cabochons because dense inclusions cause some of the sheen to "bleed" over the sides, local material must be cut with very flat crowns if a satisfactory effect is to be expected. Despite these handicaps, it is still beautiful material and worthy of consideration as a gemstone.

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2. WADIA, D. N. & L. J. D. FERNANDO —Gems and Semi-Precious Stones of Ceylon. Professional Paper No. 2, Records of the Department of Mineralogy, Ceylon, 1944. Printed in 1945. P. 39.

Many places of interest for rockhounds!

Editor R&M&:

Your column in R&M—Visiting Rockhounds Welcome—seems like a wonderful way to meet rockhounds and make new friends. I would appreciate you adding my name to the list.

During the summer we live at the lake and during the winter at our home. There are many places of interest at the lake which may prove of interest to visiting rockhounds. Our big collection is at our home but we do take some of our specimens up to the lake. I am giving you both addresses.

Home address

5 Leonard Ave.,
Springfield, Vt.

Nelson R. Longe
Shady Lane, Lake Rescue
RFD 1 Box 65-D
Ludlow, Vermont

Church built of pebbles

The Rev. Martel Tremain, missionary in Japan from 1923 to 1947 (and since working in Mexico) tells us that there is a church in Tokoshima, Japan, built entirely of beautifully colored pebbles which members of the church picked up from the sea beach each time they went picnicking and brought back to the site where their church has now been erected. The necessary cement was contributed.

Rev. Wm. J. Frazer
Moosic, Penn.

R&M for as long as he lives!

Editor R&M:

I have been a subscriber for R&M for the past 5 years and hope to be one for as long as I live.

Karl Holl
87 Fournier Crescent
East Paterson, N.J.

WHY DON'T YOU HAVE A ROCK SHOW?

by RUTH FULLING, 1323 South Baltimore, Tulsa, Oklahoma

Until you've lived through your first rock show, you haven't even cut your pebble pup molars.

And, since a rock show is seemingly the goal of every club, I say, unreservedly, "Why don't YOU have a rock show?"

Whether your club membership is 20 or 200, it's certain some of them have been collecting for years, have built a tumbler, tried their hand at faceting, dreamed up some jewelry, collected arrowheads or fossils. One member probably has what, in HIS estimation, is the finest collection of minerals outside the National Museum.

At least he had more difficulty, and more fun, collecting it!

Our small show started through no fault of my own, but I got in to it with both feet.

Okay, you say. But, where can we put on a show?

Okay, I say. Is there a bank, a school auditorium, a movie theatre, a social hall, or a church in your town?

Then, you're in.

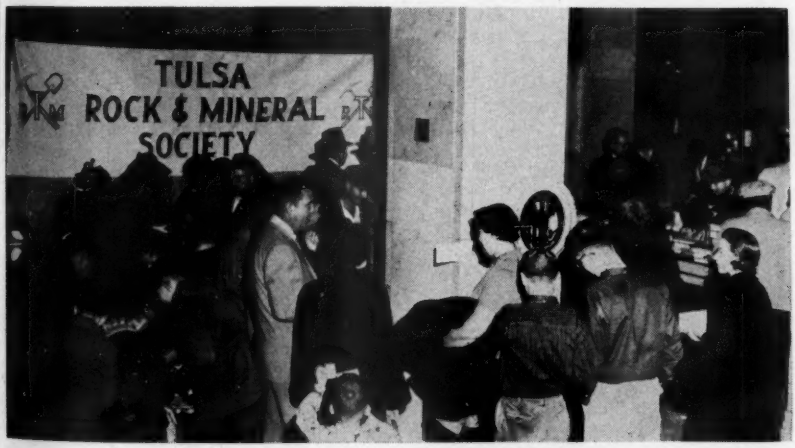
Our show was for two weeks in the lobby of the Fourth National Bank, one of the big downtown banks in Tulsa, Oklahoma. This bank, which is quite public relations minded, holds continuous exhibits in its lobby, by invitation only. They heard of our Tulsa Rock and Mineral Society and asked us to exhibit.

Our club, just eight months old, jumped at the chance. We'd been crying that no one knew we existed. Here was our chance to show off.

We met. Fifteen of us, from our membership of 150, drank cider, ate pop corn, talked fields trips and then got down to the business of the day. We had just two weeks to get ready. And, as for me, my knowledge of a rock show was about the size of a micromount.

Fortunately, one of our members was a geologist in the bank building. She had the foresight to measure our exhibit space. It looked huge. Could we cover it?

A nose count of the group assembled indicated possibly eight display cases. We wound up with nearly thirty.



Tulsa Rock & Mineral Society's First Rock Show.

For the benefit of any club contemplating such a show, here are a few musts—and how we solved them.

A sign. One of our fast talking members promoted that from her company, using old map linen so it can be rolled and used over and over.

Tables. Unless some church or organization will let you use their tables, settle for bridge tables. They're too low, I know. But, anyone interested in rocks likes to smell them anyway.

Descriptive folder. Another member promoted his company reproduction department into this, although a mimeographed or ditto job would serve the purpose. We had a few left, if you'd like to write for a copy. (Please send a stamped, addressed envelope. I'm saving my money for a trim saw.)

Lights. Check closely on the electric outlets, and see that everyone brings his own lights. Goose neck lamps work fine. Also insist each exhibitor bring his own table and a sheet to cover it.

Give aways. Most of your members, if pressured a little, can just barely manage to part with a few of their worst specimens. It will hurt. I know. I donated a big sack of barite roses. Actually, they didn't look nearly as much like the "culls" they were, once they were glued on cards and labeled. This identification is important. One of our eager beaver members achieved around 4,000 of these, glued to cards and labeled by a group of Boy Scouts and pebble pups in her neighborhood.

Staffing the exhibit. Finding volunteers with free time is a job for your hard working telephone committee. Since our show was open during banking hours only, it wasn't too difficult. Their job is to answer questions, hand out the folders and give-aways, and keep the glass covers on the cases clean. All cases should be locked. And, incidentally, don't pass up an opportunity to staff the show. I got an offer of marriage—several lovely rocks—and what a nice, elderly gentleman insisted was a petrified hand. Talk about a reasonably exact facsimile! But, was he proud of it.

The Eye Catcher at the Tulsa Rock & Mineral Society's First Rock Show.

Publicity. Try to dream up something interesting in the way of pictures to offer the newspapers. We set up one shot of a small boy and a beagle hound smelling a rock. An eye catcher. Another was of what we termed our "monster". This was a story in itself, but to brief it—one of our members had found a really choice fossil find at a coal pit about 30 miles from Tulsa. The fossils were plants—ferns and flowers—over 250,000,000 years old, of the Pennsylvanian period. One of the rocks, weighing around 500 pounds, was brought in by six of our strong backed, weak minded male members who hewed trees, built a sling of ropes and set the monster up in the corner of the bank lobby. With two small boys peering it at, it made a good picture. The monster? Why the University of Cincinnati heard about it and offered to pay the freight if we'd let them have it. We did, rather than haul it back to the coal dump. How's that for a club becoming famous?

Also, on publicity, a call to one of our television stations booked one of our members on an early morning show. He took some rocks with him. The camera man and the announcer got interested. The show almost ran overtime, and while NBC and MGM haven't contacted him yet, we thought he was better than Linkletter or Gleason.

He thought so, too.

At any rate, our little show caught on. We almost doubled our membership. Hundreds of people here in Tulsa, and some even up in Ohio, know we exist. The bank said it was the most successful exhibit they'd ever had, and want us to come back in 1959. We had some really unusual displays of Oklahoma minerals, cabs, jewelry, Indian arrowheads and artifacts, fossils and tumbled stones. One of the most beautiful among the many faceted displays was a gorgeous, big faceted Apache tear.

So, give it a whirl. Showing off your treasures is fun.

Why don't YOU have a rock show?

But, what will I ever do with that petrified hand....

A worthy project!

A continuing project has been undertaken by the St. Louis Mineral and Gem Society at the suggestion and under the direction of one of our members, Mr. Howard York of Brentwood. It is to preserve the natural beauty and to have made into a State Monument, the massive formation at Graniteville Mo., known as Elephant Rocks. Mr. York has written a number of State and local officials on the matter and the Society as a whole is asking all interested parties as well as all other mineral clubs in the area, Audubon groups, boy and girl scouts, nature clubs, garden clubs, etc., to give this matter their full support. Anyone else who is in favor of this project contact Mr. Howard York, 9125 W. Lawn Ave., Brentwood, Mo.

Elephant Rocks is definitely a site that should be preserved as a State Monument.

Jeanette Strope, Publicity
3239 Ohio Ave.
St. Louis 18, Mo.

Ytterbium metal available

The availability of ytterbium metal of 99 per cent purity in lump or ingot form, or in fabricated shapes, has been announced by Research Chemicals, Inc., 170 West Providencia, Burbank, Calif., a division of Nuclear Corporation of America.

Ytterbium presents several anomalous properties in the rare earth sequence, such as significantly lower melting point and density. These properties, coupled with resistance anomalies, suggest potential usefulness for semi-conductor applications and electronics devices as well as new alloy compositions.

Some minerals containing ytterbium are gadolinite, sipylite, xenotime, and euxenite.

The Colorado School of Mines, Golden, Colo., the nation's oldest college devoted exclusively to the training of engineers for the mineral industries, grants degrees in geological, geophysical, mining, metallurgical petroleum and petroleum refining engineering.

FIFTY YEARS OF MINERAL COLLECTING

By GUNNAR BJAREBY, 147 Worthington St., Boston 15, Mass.

A half-century of mineral collecting may seem like a long time to most of us, especially if we just now are getting interested in this, the most fascinating, of all collecting hobbies. To me these fifty years passed by much too quickly. It seems rather like less half the time since I started to collect minerals.

Since everything has a beginning and an end, except Time, Space and Matter, this is how these three entities so far, through the means of minerals, have influenced my existence.

The time was in mid-March 1909, The space, in this case place, was the home of a young boy two years my senior. He lived with his grandfather and aunt in a hamlet named Qvinnoboske in the township of Grevie, Skane province in southern Sweden. And the matter was his small collection of minerals, rocks and fossils. That was all I needed to see to become forever interested in that sort of matter. Rocks per se have been of secondary interest—usually something to waste much energy on, to get rid of, to sledge and chisel down into suitable bases for crystals or cleavages making them into interesting matrix specimens, which are preferable to loose crystals. For a while I collected a few fossils also, but one needs a lot of space for these things. In those early years, five to twenty, I collected bird's eggs, insects, plants, coins, stamps and Swedish stone-and bronze age implements.

The same day that we moved to the next town, where my parents took over a country store, I met Gunnar Rosendahl, whose home was on our land. On the way home, after having seen his collection, I began to scrutinize the stone walls which were everywhere. Not many specimens were collected this way, but what we found we cherished. There were a few quarries in the county, but not until we got bicycles was it possible to visit those wonderful places. We even tried gold panning. We made a few expeditions up in the hills along the brooks trying a pan or two at likely looking places. We had scrounged a rusty, battered enameled washbasin, which we used for a pan. The grubstake was sandwiches of dark rye bread and dill pickles. The only thing missing was the old burro and, incidentally, the gold. However, we did get plenty of flashes in the pan, but soon found out that our color, although gold-like, was just iron-stained mica, locally known as Crow's gold. One of our neighbors, Petter Nilson, had made his fortune in the Klondike; he told us much about Alaska and showed us a $75 gold nugget. Then we realized that what we had panned was not even fool's gold.

There was a good study collection of minerals in our community. It was periodically moved from one to another of three schools. One day our school teacher sent the two huskiest boys in our school to get the collection. They were gone most of the day. The following day we had a few delightful hours handling and taking down data on 150 minerals. To Rosendahl and me this was one of the most memorable days in our pre-teens.

There was very little fooling around in those classes of 70 kids and one teacher. He did not hesitate to use a suitable length of rattan when necessary. There were no squawkings by parents and no one sued the teachers for putting a temporary decoration on junior's rear.

During the fourteen years that followed I stayed in this general area. There was work to be done and a trade to be mastered. My pal had an aversion to work in general and eventually became a preacher. Mineral collecting was somewhat sporadic. Travelers gave me a few foreign specimens. During the first World War it was possible to get a few pieces of ores from railroad cars en route to Germany. The collection grew

slowly but it was well kept and many people came to see my minerals. In the meantime I had learned my trade and it was time to study art. Being a journeyman of any trade in Scandinavia actually means to journey, and most of us traveled far into foreign countries. For a while I thought of Germany, Switzerland and France, but several of my contemporaries went to the United States. So, with the idea of four or five years abroad and then back to Sweden, I rang a certain bell on South Street in Brockton, Mass. on a rainy day in May 1923.

As soon as I had acquired a bit of confidence in my third adventure into a foreign language, I moved to Boston. At the New England Museum of Natural History (now defunct) and at the Mineralogical Museum of Harvard I spent much of my spare time getting acquainted with minerals and learning about the most outstanding mineral localities. The nearby localities could be reached by means of busses and street cars or, if necessary, on foot.

During all those field trips I met only one collector, Mr. Baum, then a student at Harvard. He was busy getting good babingtonite specimens in the Blueberry Mountain quarry, Woburn, Mass. It was the first time anyone ever showed me a real find. He also showed me a piece of allanite explaining its radioactivity. This phenomenon never has ceased to fascinate me and, as a group, the radioactives have been the most interesting of all minerals. In a few moments I found my best piece of local allanite, which is still in my collection. About thirty species have been observed at this locality. It has produced exquisite micro crystals of orthoclase, prehnite and babingtonite. One of those specimens is unique inasmuch as it has crystals of chalcotrichite implanted on a background of brilliantly black babingtonite.

During 1926 I noticed the first advertisement about *Rocks and Minerals Magazine* in *Popular Mechanics*. Mr. Zodac's excellent mineral collectors' magazine has followed me ever since. How many of you first year's subscribers are still active collectors? My file of R&M's is complete. In the earliest issues the names of new collectors were listed, and I noticed a few in this general area. For a couple of years I often thought of starting a mineral collectors' club in Boston or Cambridge, but I was busy with art studies and didn't have much spare time. Then followed a year in Chicago and San Francisco and later a year of studies in Europe. While abroad I managed to collect a little in Norway and Sweden.

Gunnar Bjareby in 1923 when he was 24 years old.

Late in the fall of 1933 I was back in Boston. Now I began to venture further afield and the collection grew a little faster. There were long rides in cars, busses and trains up to Maine, New Hampshire and Connecticut. The following spring there was another collector, the future Mrs. Bjareby.

Kaarina came from Finland. She had spent most of her summers in the country and was never afraid of roughing it on the many trips we have had together. She found a number of fine specimens. In the late thirties and the forties there were comparatively few collectors in the field, and good specimens usually were to be had without much effort. Today, if one wishes to try for similar material, it is necessary to dig down several feet in the quarry dumps.

At this point it might be well to clear up the question whether the locality is a mine or a quarry. A quarry is an open digging regardless of what is taken out. A mine is an underground operation. It can start in the floor or walls of any quarry, when shafts or tunnels are blasted or dug out following a pegmatite, marble or any orebody. Take the catacombs under a section of Paris, France. The limestone was first quarried in open cuts but later mined under the buildings, so we have quarries that were changed into mines. Some of our western copper localities usually are referred to as mines, whereas they actually are ore quarries, until underground tunneling is started. Henceforth all localities will be referred to as quarries, if there are no shafts or stopes. Those that have will be considered as mines.

Kaarina and I had our first vacation in the pegmatite area of Oxford County in Maine. We stayed in Greenwood and from this base made daily excursions to many active "spar mines". The most impressive sight was the wall of rose quartz with its huge beryl crystal in the Bumpus Quarry. What already had been taken out of the beryl filled a small shed. It had rained a little, so the rather good color of the quartz was enhanced and so it was with the green beryl also.

Some years later a friend of mine wanted to take color movies of this quarry, but an armed guard told us not to get near the place. We were told that some kind of litigation was in process and the man had orders to keep everyone away from the place.

Collecting in pegmatites was a brand-new adventure to me, and there was so much good stuff to choose from. It didn't take long to convince me that pretty gem stuff just doesn't lay on the ground or sit in the walls to be removed. Anyhow, I have never been particularly interested in gem material or gems. A well formed crystal is far more interesting, especially if it is a matrix piece.

Since this was our first venture into Maine mineral area, it might be of interest to elaborate on a few of the localities. We visited Mr. Tamminen, Sr. then living on the other side of Noyes Mountain in Greenwood. He and his wife were busy working a pegmatite for feldspar. They had a sturdy horse, which hauled a heavy wooden drag or sleigh on which the feldspar was loaded. The quarry was up on a fairly steep hillside and the loading platform near the bottom, so the load had to be pulled downhill only, which actually was fairly easy for the horse. Mr. Tamminen gave me a very good beryl crystal from his quarry. I still have it in my collection.

A few hundred feet further back another Finnish couple, the Ohtonens were working a bigger feldspar quarry. Here I collected a pyrite specimen which had a little gahnite on it. There was another, at the time a rather rare mineral, the beryllium silicate bertrandite, together with fluorapatite.

We went to the Harvard Quarry on the steep side of Noyes Mountain. Evidently someone was operating there at the time, because I noticed a new detonator a little above the quarry. We found our first purplish fluorapatite crystals, cassiterite, cookeite, lepidolite and those enigmatic quartz casts of some long ago vanished crystals of an unidentified mineral.

Mr. Tamminen's son had worked a couple of quarries near his place. Here we found more fluorapatite crystals and a whitish apatite of the Hebron type; basal pinacoids and no prisms. In one of the localities, referred to as the Pasture Quarry, there was some beautifully rose colored montmorillonite and the rather rare petalite. In recent years Mr. Tamminen has worked this quarry and recovered many interesting minerals which may be seen in his collection. Rather good muscovite pseudomorphs after stubby doubly terminated tourmaline crystals were found beside the road near the Tamminens. In a roadcut along the same road but in the opposite direction near a pond some pegmatite was encountered in which I found long black

tourmaline crystals, a specimen of which is now in the main library of Johannesburg, South Africa.

There is an ice cave on Uncle Tom's Mountain in Greenwood, not very far from a quarry. While looking for it we found the ice cave. Although it was after Labor Day we walked on ice from the previous winter season and it was possible to make a few snowballs from the icy mush. We found the quarry also but failed to see any of the pollucite which at that time was its most interesting mineral. In recent years colored apatite crystals have been found there.

Everyone in Maine talked about Mount Mica and its "termaline." A kind-hearted farmer in South Paris gave us a lift to this famous locality. While prospecting here and there at that place, someone else arrived and we met Mr. Nevel. He told us where the gem pockets had been and where the debris had been dumped. We dug a while in those old dumps but found very little worth taking home. However, there were a few one inch, fairly well formed almandite crystals in matrix. Some autunite was associated with the garnets.

Mr. Nevel was a famous collector and had worked the Dunton Quarry in Newry, where he had taken out some good colored tourmalines, amblygonite, pollucite and many other unusual pegmatite minerals. He also had started the lower workings now known as the Nevel Mine. He was accidentally killed by a dynamite blast. Later on I was to visit those localities many times. That week in Maine was a marvellous vacation of long hours of hard labor.

(To be continued.)

Vitro resumes production of uranium-based ceramic colors

PITTSBURGH, Pa.—Uranium colors are back from "war"!

After an enforced absence of 18 years in the interest of national security, Vitro Manufacturing Company has resumed production of uranium-based colors for the ceramic industry.

Vitro's new line of "atomic" colors includes yellows, oranges and greens, all produced from uranium salts. Although quite harmless, the uranium adds unmatched brilliance and superior handling qualities to these ceramic pigments.

The new colors are now being manufactured at Vitro's Pittsburgh plant just a little more than six months after the lifting of an AEC ban on non-nuclear uses of uranium.

Vitro Manufacturing, a division of Vitro Corporation of America, first produced uranium-based colors in 1926, and prior to World War II was the recognized leader in production of uranium-based colors for pottery, glass and porcelain products. However, in 1942, all industrial uranium supplies were called to war for the Manhattan Engineering District.

A new subscriber tells us!

Editor R&M:

I think R&M is the best in its field and I don't know how my wife and I hadn't found about it before, but we hope to spread the good word about it now. I also plan to give subscriptions to R&M as gifts in the future, and this proceedure would make it less complicated and involved for me.

Thomas A. Hensel, M.D.
3728 Walnut St.,
Harrisburg, Pa.

Free—Information on new, low-cost science materials program

Information on how to obtain low-cost yet reliable, educator-approved science teaching aids is available free from the new young adults' division of the Science Materials Center, 59 Fourth Ave., New York 3, N.Y.

Of particular interest to educators who have to stretch science materials dollars, the new division has been established to supply unusual savings on equipment, kits, books and records for elementary, junior, and high school ages.

DRYHEAD AGATE . . . PRIZE OF THE FORTIFICATIONS

By WAYNE R. BREITWEISER, 510 North Division, Powell, Wyoming

Wild, desolate, mountainous, beautiful—adjectives really cannot describe it—is the Dryhead Country adjacent to the Big Horn River between the towering ranges of the Big Horn and Pryor Mountains in northern Wyoming and southern Montana.

The Dryhead Country is approximately 80 miles long north and south and from 10 to 30 miles wide east and west. It is the territory between Kane, Wyo., and Pryor, Mont., along the Big Horn River, and between the two mountain ranges. It is traversed by one trail and scores of canyons. Jeeps and sturdy pickups travel this trail; cars have trouble navigating this wild and rugged country.

The southernmost 25 miles of the Dryhead is perhaps the most beautiful, considering the rugged terrain. The one-track trail, dug out of the Pryor mountain sides, follows so perilously close to the seemingly bottomless Big Horn Canyon one can look straight down for hundreds of feet—or straight up into the Pryors for hundreds of feet. And on this same one-track trail many hairpin curves sometimes make us wonder "Shouldn't we have stayed at home?"

Rainstorms and cloudbursts rake the Dryhead during summer months, causing flashfloods which quickly erase any semblance of the trail. So far, we haven't been caught in a "gully-washer", but knowing the nature of the varmints, we have "raced" them out of the area on various trips.

The length and breadth of the Dryhead Country is a mecca for rockhounds. In it is found a beautiful fortification agate, similar to the Fairburn of South Dakota. Since this type of agate is found only in the Dryhead Country, it has

Photo #1—A fine Dryhead Agate, cut and polished to show its fortifications.

appropriately been named Dryhead Agate.

My wife, Betty, and I, hunted this particular agate for seven years before we found the beds. After we had gotten into the Dryhead Country we soon found that the only way to hunt for the agate was on foot. When first hunting the material we traveled by pickup but quickly found that impractical for always we would get "rimrocked" by some deep and gorgeous canyon. We searched for the beds by walking mile after mile, always on the trail but never quite finding it. Reward was ours, however, after years of searching.

Perhaps there are a dozen rock hunters in northern Wyoming and southern Montana who have found Dryhead Agate, and we believe it safe to state that each has his own individual bed, not found by chance, but by intensive and long-mile walking searches.

The beauty of these agates is contained in the fortifications. The matrix of Dryhead Agate is generally red, yellow, pink or brown. The fortifications consist of straight and curved lines, swirls, eyes, wide bands of quartz crystal inside fortified lines, sometimes other fortifications inside the crystal areas.

The agates vary in sizes. The smallest—we call Baby Dryheads—are a half-inch to an inch and a half in diameter. They are very rare and hard to find. Sometimes we hunt all day long and find a pint of the Babies but the hunting is worth it because these little polished beauties make into outstanding baroque jewelry.

Another size, one and one-half to two and one-half inches, is fine for cutting material and specimens, and usually each contains several fortifications. Then there are the larger Dryheads. Sometimes the big ones fool us; sawing through the middle is the only way we can tell if the fortifications go through

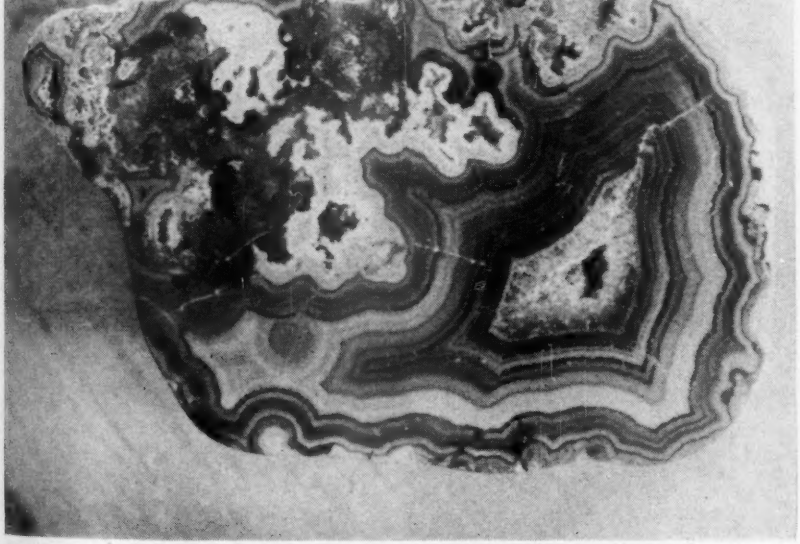


Photo #2—A butt end of an extra fine fortification Agate.

the big stones—sometimes they do and sometimes they don't.

Nearly all Dryhead Agates look the same on the outer surface—encrusted with a limestone coating with small warts or bumps. Nearly always these bumps will develop into fortifications. When hand-grinding a bump, if a fortification shows just below the surface, always it will lead into something pretty big and beautiful.

Accompanying photos are a few Dryhead Agates in our collection:

Actual size of the stone in No. 1 is 2½ by 2 by 3 inches and it weighs two pounds. It is cut and polished on seven sides and all sides show fortifications. The lines are white, grey, pink, dark red and brown. Many of the fortified areas fluoresce a delicate green—as do most Dryhead Agates, which helps distinguish them from any other known fortification agate—and the swirls, also common in Dryhead Agate, show up on all sides of this specimen.

Photo No. 2 is a butt end specimen and actual size is 2 by 1¾ inches. The lines are white, pink and red and the area inside the large fortification is quartz crystal. Just the outer white line fluoresces. Several other fortified areas can be seen on the surface.

Photo No. 3 is a 1 by 1 inch cabachon of white, pink and brown fortifications on a background of pale yellow.

Another Dryhead Agate in our collection measures 1¼ by 1¾ inches. It is almost round with flat polished surfaces opposite each other. The two open surfaces are individual fortifications. The stone is ground smooth and polished and at least 60 individual fortifications have been counted on the outer surface. Unique feature of this specimen shows that

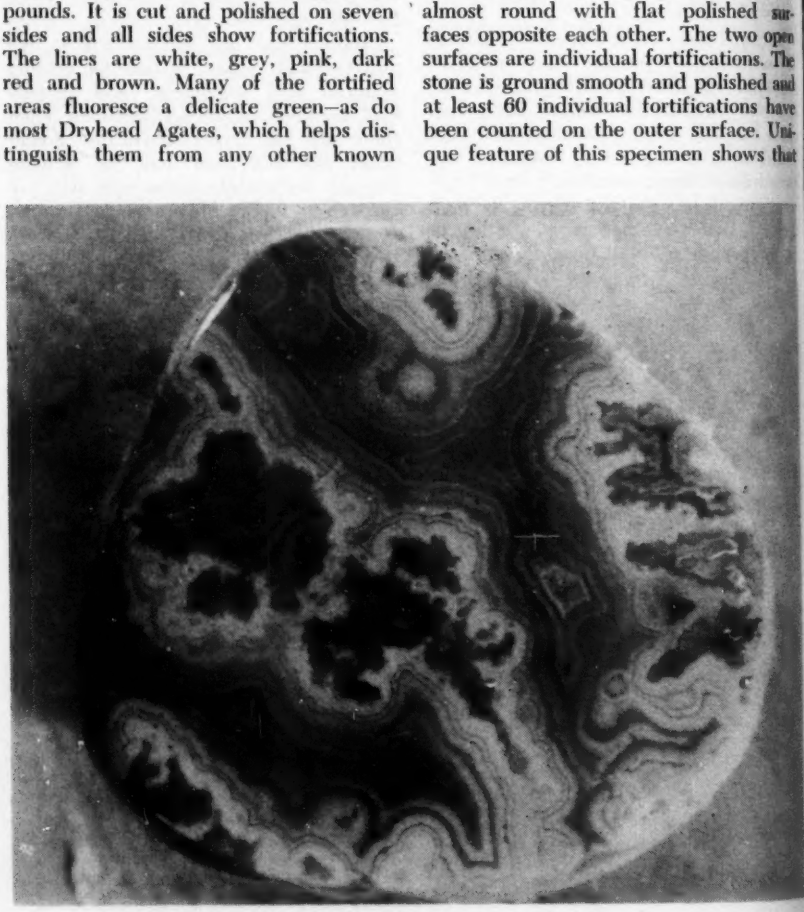


Photo #3—A 1x1 inch cabachon of a Dryhead Agate.

one fortified pattern will fluoresce while another lined area next to it will show no color.

It's hardly possible that the Dryhead Agate was laid down by glacial drift; rather it must have been formed by upheaval, gases, sedimentation or eruptions. Most all the beds that we have seen are immediately above thick layers of either sandstone or limestone. And we have found almost round nodules, completely coated with quartz crystals from a ¼ to ½ inch thick; inside the nodules are beautiful fortification agate.

Some of the Dryhead Agates show considerable fracture, but by careful study, cutting and trimming, outstanding cabachons and specimens can be obtained from each stone.

Hoodoo Agate is another beauty found in the Dryhead. This agate features blotches and bands of red in a background of clear agate or red jasper and it takes a brilliant deep lustre when polished.

Vari-colored and banded jaspers, Indian trails, artifacts, villages, tepee rings and fire pots are found in profusion all over the Dryhead Country, part of which is in the Crow Indian Reservation. Other parts of the Dryhead contain lush grazing lands on which many Wyoming and Montana ranchers run cattle. Roads into the area are not inviting; the scenic beauty there is unbeatable; it is practically virgin territory for the rockhounds where wild game, wild flowers and rattlers predominate.

Happy to show collection to visitors!

Editor R&M:

Please enter our names in the Collector's Corner and also Visiting Rockhounds Welcome, in R&M.

We live in the heart of Fox City, one of the widely known geode areas. We think our geode collection is about as complete as any geode collection could be and are always happy to show it to visitors. We also trade minerals and have a very nice collection in that line too.

Merryl & Mary McCoy
RR 3, Kahoka, Mo.

Gem City Rock & Mineral Club

Editor R&M:

I wish to advise you that a group of rockhounds in Erie, Pa., and surrounding territory, have formed an organization known as the Gem City Rock and Mineral Club. The organization will, of course, cover all phases of mineralogy, geology, and paleontology of Pennsylvania and neighboring states and will also enter into developmental and educational training in cutting, polishing and setting of gem materials.

Mr. & Mrs. Paul A. Lawhead of Erie were instrumental in the initial formation of this club and as such certainly merit the thanks of all present and future members.

It was decided to designate R&M as our official publication.

The writer will be glad to offer his services in regard to any inquiries concerning this club and will turn such inquiries over to the Board at the next monthly meeting. Address such inquiries to J. A. Oldenburg, Box 1696, Erie, Pa., or phone Fairview, Pa., 4325 in the evening.

Come and get them!

Editor R&M:

Again I find myself with a large supply of rocks and minerals suitable for beginners. I will be happy to give an assortment of these to anyone who calls on me. Out of town visitors should first write for an appointment.

As stated before, there are no strings attached, no ax to grind, and *please*, no mail requests this time.

Charlie Bennett
210 W. Franklin St.
Horseheads, N.Y.

R&MA members, be sure to have your membership card with you when calling on Mr. Bennett—you may receive some extra specimens!

Wow, somebody knows Peter Zodac!

Editor R&M:

Everywhere we go, from the old San Pedro mine in New Mexico to the Caribe Hilton in Puerto Rico—somebody knows Peter Zodac!

Dr. Thos Q. Garvey
430 E. 86th St.,
New York 28, N.Y.

WORLD NEWS ON Mineral Occurrences

ITEMS ON NEW FINDS ARE DESIRED
PLEASE SEND THEM IN.

Abbreviations: xl—crystal xled—crystallized xline—crystalline
fl—fluoresces ph—phosphoresces

ALABAMA—Arbacoochee, a tiny town in southern Cleburne County of N/E Alabama, was famous over 100 years ago for its gold mines. The gold was found chiefly in placers. Records have it that very fine specimens of native gold in whitish quartz were found, some as float and some in the quartz veins of the area.

ALASKA—In the Mar-April 1959, R&M, on p. 117, Frank H. Waskey, Oakville, Wash., mentions seeing an instance of how a quantity of hard rock had hitched a ride from some distant shore to be stranded on Kujulik Bay on the Alaskan Peninsula. About 20 feet of the bole of a giant coniferous tree was hung up near low tide line. Held securely in the roots of this tree was a mass of rock that had underlain this tree when it was upright in a more favored and temperate clime. With some difficulty he knocked off a couple pieces of the rock and with his pocket knife, cut a length of the slender rootlet. There are no trees of a comparable growth within a thousand miles, airline, of the giant's resting place.

A 1½" piece of the rock was sent R&M—it is an interesting specimen of gray granite showing specks of brassy-yellow pyrite. A 4½ inch piece of the root with a very slender 6 inch rootlet attached was also sent in by Mr. Waskey, but unfortunately no one at R&M was qualified to determine from it the tree's identity.

ARIZONA—"In the northern part of the Superstition Mountains, in Pinal Co., Ariz., the writer discovered numerous quartz crystal groups. The groups are attractive in view of the fact that they were found early in the writer's interest in minerals and unlike many of his early finds, still hold a place of value in his collection."—item sent in by Gerald Navratil, RFD 2, Middleburg, N.Y.

ARKANSAS—We are indebted to the Corbin's, Box 261, Morrilton, Ark., for a beautiful pinkish, xled dolomite that comes from one of the old zinc mines at Rush, Marion Co., Ark.

CALIFORNIA—Very nice specimens of native silver (silver-white in color) have been found in the Silver Mountain district, Alpine Co., Calif.

COLORADO—"Prof. Richard M. Pearl of Colorado College, Colorado Springs, Colo., told me to write you of my discovery so you might print it in your section of new finds in ROCKS AND MINERALS. My discovery is the green chromium garnet, uvarovite. It occurs in green octahedra in quartz from the Mica Lode, Royal Gorge District, (Fremont Co.), Colorado. The garnet ranges in size from tiny grains to crystals ¼" on a crystal face. This find makes the third variety of garnet that occurs in the Mica Lode. The varieties are aplome (andradite), hessonite, and uvarovite. I hope that this

finding of the first uvarovite in Colorado will interest you. Thank You"—Note dated March 3, 1959, from George Robertson, Fountain Valley School, Colorado Springs, Colorado.

CONNECTICUT—"Enclosed are a few almandite garnets from Roxbury, Conn. They aren't gem quality but the majority are well formed crystals. You could mention in World News that the towns of Roxbury and Woodbury (Litchfield Co.), Conn., have large garnet gravel pits, which gravel is used for top dressing on all the dirt roads in this area. Find one of these roads and you have miles of garnets spread over the surface. Perfect garnets up to an inch in diameter are easily picked up."—item sent in by Harvey Bailey, Plainville Ave., Unionville, Conn.

Six dark red almandite garnets were received. They varied from ¼ up to 1 inch in size, were of nice quality, and all dodecahedrons (12-sided crystals).

DELAWARE—Pinkish chalcedony pebbles have been found on Bowers Beach, Kent Co., Del., by Bob and Hazel Reynolds, Stockdale Rd., Kingsville, Md.

FLORIDA—"Found on the beach at Terra Ceia (Manatee Co.), Fla., near the water line along with the usual oysters. Most of them are more or less geodes with crystals that are very tiny forming radiating points. They are usually small but occasionally they are up to six inches across."—item sent in by Mrs. Ray F. Bowman, 1791 Sylvan Drive, Clearwater, Fla.

A specimen also received. It is a cream colored botryoidal mass of calcite —rather attractive!

GEORGIA—"Pegmatites being investigated in the Barnesville area (Lamar Co.), Ga., by Mr. C. M. Hendricks bear an apatite mineral that contains unusual amounts of the rare earth elements.

"The apatite is honey-colored to brown to reddish-brown. It occurs in fractured, irregularly shaped grains up to several mm across that are generally enclosed in feldspar, less often in quartz. The apatite occupies fractures in the enclosing minerals, and is notably concentrated along the margins of large, contorted biotite books."—Mineralogical notes by Vernon J. Hurst, Georgia Newsletter, Spring 1958, p. 31 (Published by the Georgia Geological Survey, 19 Hunter St., Atlanta, Ga.—A.S. Furcron, Editor).

IDAHO—"I have just recently found some sort of mineral—looks like varnished cinder and is beautifully iridescent. It comes from beneath lava basalt cliffs. It is very interesting and makes beautiful specimen material.

"By separate mail I am sending you a specimen of this iridescent material. Will you kindly identify it for me?

"This material is found about 30 miles west of Shoshone, near Bliss, in Gooding County, Idaho. This is on Highway 30. Hope you can identify it as I believe it makes a very nice item to add to any collection. It can be obtained in pieces up to 10 lbs. or 8 x 10 inches. I have not had much time to really investigate the deposit but there are indications of a sizeable amount and I think there are different colors of iridescence as I found one piece of yellow-red."—letter dated March 2, 1959, from C. K. Henning, Box 482, Shoshone, Idaho.

A 3 x 3 inch specimen mas received and it is truly a handsome one. It is a cellular mass of black obsidian with a beautiful blue-green iridescence.

ILLINOIS—"We happened upon, or should I more correctly say 'saw for the first time', the loess or 'Loess Kindchen' just on the outskirts of this small town. I have found that this is something new to most people. The concretions bring out the imaginative streak in us. I am enclosing several of these concretions, and although they are probably not new to you, perhaps you have none from this central part of Illinois."—item sent in by Dorothy (Mrs. Robert) Shipton, Delavan, Illinois.

Six, grayish concretions of various sizes

and shapes were received. They resemble in appearance and form claystone concretions but are much softer, being almost clay-like.

"Calcareous loess concretions, called Loess Kindchen or 'little children of the loess'. Collected by Dorothy Shipton at Delavan (Tazewell Co.), Illinois."—on label.

INDIANA—Pyrite has been mined with coal (bituminous) at Terre Haute, Vigo Co., Ind.

IOWA—Pinkish masses of microcline, some with tiny lustrous black flakes of biotite, were found in a large rock in a ditch in Melrose, Monroe Co., Iowa, by Michael Papcum, RR1, Melrose, Iowa.

KANSAS—The following letter was sent in a few months ago by Byron C. Marshall, Hot Springs National Park, Ark.:

"UNUSUAL ASSOCIATION. A few months ago, I purchased a number of specimens from that famous Zinc-Lead District, which includes N. W. Arkansas, S. W. Missouri, S. E. Kansas and N. E. Oklahoma, and which area has been mined for many years.

"One specimen is so unusual I wish to report upon it. This particular specimen is from near Baxter Springs (Cherokee Co.), Kansas. It is about 3½ x 3½ x 6 inches and weighs 4 lbs., 9 ozs. This cluster is made up of a chert base and upon this drusy quartz and sphalerite simultaneously formed, as they are intermingled.

"Next, it seems the galena formed. This lead is the main bulk of the specimen and these xls, range from about ½ up to 1¾ inches along one edge, though some xls, are compound and made up of two or more joined together and therefore larger. This galena is a dull type. It is interesting that some lead can be so dull and others so very bright.

"Then there was another period of formation for the sphalerite and xls, from minute up to 1 inch through, formed on the lead.

"Next, small xls, of marcasite (tabular-spear point), and iron pyrite (tiny cubes), formed on the drusy quartz, galena and sphalerite. Also drusy quartz again formed in a few small patches on the surface of the galena in places.

"Lastly, a few small golden calcite xls, formed. What an arena of marvel and what a joy to the collector who goes in for a detail of mineral construction.

"I might state that the sphalerite varies from black (marmatite, black-jack), through yellow (rosin-jack), and topaz to reddish (ruby-zinc).

"An interesting question arises that in as much as iron pyrite and marcasite are the same chemically, how does it happen that this chemical combination (sulphur and iron) formed into two different classes and even two systems of crystallography, when intermingled together on the same surfaces, under the same conditions, is a little hard for a poor, dumb human to understand? Of course I know that we were not here at that time, to take instructions in the chemical and physical labs., of those advanced times. We simply lost out in this deal, and in the meantime the human race has deteriorated mentally (probably from extreme old age), so that now, we are not apt students for the greatest university of them all. Well, any way, I am glad that we have capacity enough to admire, even if we don't understand all. It is good to be as happy, as though one had good sense. Such a status is commendable.

"So we conclude by stating that we have the rare combination of six minerals on a chert rock base. Any combination of over five kinds of minerals is so unusual that I feel it should be recorded."

KENTUCKY—Maj. Raymond V. Pruett, Sulphur, Ky., sent in the following item: "The Fort Knox, Ky., geode area has been reported before as I found them from a location given in R&M.

"There is a cut separating a hill on the Dixie Hwy at Muldraugh Hill. About halfway up the hill there is a roadside rest area on the east side. Park in the next area and walk back down the hill thru the cut. The drainage ditch for the

cut runs about 50 or 60 feet past the cut then breaks sharp down a hill to a ravine. At the point where the drainage ditch breaks away from the road it makes a small cataract over a soft blue clay (when wet). This clay is full of geodes from the size of ½ inch up to about 6 inches in diameter."

A nice little geode was received from Maj. Prueitt. It was lined with drusy, white calcite xls.

"Geode. Muldraugh Hill, Fort Knox (Hardin Co.), Ky. East side Dixie Hwy, 300 yds. N. of Rest area (Road side)." –on label.

LOUISIANA–A flat, 4 inch long, gray and dark brown petrified wood pebble, was sent in by Jimmy Henderson, 1345 W. 10th St., Bogalusa, La.

"This specimen comes from my dad's gravel pit on the outskirts of Bogalusa Washington Parish), La."–on label.

MAINE–"Under separate cover am sending you 18 samples taken from a pegmatite formation on my farm, in the Goose Rocks area of Kennebunkport, York Co., Maine. No. 1 is black tourmaline from #3 pit. Do you think it is a nice specimen?"–item sent in by Clifford D. Seavey, Box 14, Kennebunkport, Me.

It certainly is a nice specimen! It is a loose, lustrous black, striated xl, 1½ x 1½ x 1 inch thick. A very, very nice specimen!

MARYLAND–Pale bluish-gray fibrous masses of kyanite on milky quartz have been found in Deer Creek, Harford Co., Md.

MASSACHUSETTS–From Bettey's Minerals, 130 Hale St., Winchendon, Mass., we have a thin slab (3 x 3 inches in size) of dark gray, very fine grained mica schist in which are imbedded 10 chiastolite (andalusite) xls of a whitish color. No two xls are alike, each is different–but most show crosses in section–a typical arrangement of the mineral. The letter with the specimen reads:

"From what we have seen, the chiastolite occurs as boulders and rocks in the fields and woods in the Clinton, Sterling, Lancaster area of Worcester County, Mass. It is probably float material. We haven't seen any in place yet but there is much of the area we haven't seen.

"In the greyish-black chiastolite schist, about one out of ten that I have slabbed has produced figures all the way thru the rock. The other nine have been mostly surface figures–look good on the outside but nothing inside.

"We have one good specimen that is a tannish-black which has 18 4-leaf clovers and crosses in cigar-shaped tubes showing on the face of the rock and they go clear thru the specimen. It is much harder than the grayish-black type and the designs have a reddish color. These are hard to beat."

Mr. & Mrs. Albert S. Bettey, who conduct Bettey's Minerals, have many nice specimens of chiastolite for sale. The specimen sent us comes from around Lancaster, Worcester Co., Mass.

MICHIGAN–Harry A. Laurent, Box 645, Nashville, Mich., sent in a nice specimen of dark gray petrified coral (silicified).

"I have a large specimen of this coral that weighs about 2 lbs.–found near Nashville (Barry Co.), Mich."–on label.

MINNESOTA–Dark gray chalcedony pebbles have been found in the gravel pits around Hopkins, Hennepin Co., Minn., by Adolph A. Sidla, 201-15th Ave. No., Hopkins, Minn.

MISSISSIPPI–Plymouth Bluff, on the Tombigbee River, 4 miles above Columbus, Lowndes Co., Miss., consists of Eutaw sands which are highly fossiliferous, *exoggra ponderosa*, a spirally twisted shell of the oyster family, is especially abundant.

MISSOURI–Fine crystal groups of blackish-brown sphalerite have been found in the lead-zinc mines of Joplin, Jasper Co., Mo.

MONTANA—Gerald Navratil, Box 70, Middleburgh, N.Y., who has spent many summers in the northwest, sends in the following item:

"Philipsburg (Granite Co.), Mont. Fluorite, partly in modified crystal form on massive and crystallized rhodochrosite, was found in a pocket and produced many fine specimens. One graces the cabinet of this writer. This association of fluorite with rhodochrosite is considered extremely rare in the district."

NEBRASKA—Everett Lapidary Shop, 2941 N. 65th, Lincoln 8, Nebr., sent in an interesting specimen consisting of nice brassy-yellow pyrite xls on fossiliferous dark gray limestone.

"From the Queen Hill limestone quarry, Murray (Cass Co.), Nebr."—on label.

NEVADA—"In the Tailings around Sutro Tunnel, pyrite xls, not to mention small quantities of gold, silver, galena, sphalerite, and other minerals, are there for the taking despite working and reworking by various mining concerns. I found a beautiful fluorite xl there which I thought to be amethyst, until it faded." —note sent in by A/2C Lawrence E. Wright, 55 PMS, Box 119, Forbes AFB, Kans. Mr. Wright's home is in Carson City, Nev.

Sutro Tunnel, 6 miles long, was built to drain the famous Comstock Lode (gold mines) in Virginia City, Storey Co., Nev.

NEW HAMPSHIRE—"Here is an item I've never seen mentioned in R&M. A graphite Mine is located about 1 mile north of the village of Nelson (Cheshire Co.), N.H., on the east side of the road. Nearly pure masses of graphite can be obtained in slabs without much effort." —item sent in by Mrs. Julian Wetherbee, 22 Wheelock St., Keene, N. H.

NEW JERSEY—Pinkish, radiated masses of stilbite have been received from John S. Albanese, P.O. Box 221, Union, N. J. Locality for the specimen is the Commonwealth basalt quarry at Summit, Union Co., N. J.

NEW MEXICO—William Dillon, c/o Worrell Hall, Texas Western College, El Paso, Texas, sends in the following item:

"An interesting locality in New Mexico is Lake Valley in Sierra County. It is situated between Silver City and Las Cruces on State highway 27. Manganese, vanadium, and silver minerals are characteristic of this area. A manganese mine is in operation and collectors may search over the dumps after obtaining permission. The primary manganese mineral is pyrolusite which occurs as beautiful steel-gray xls in limestone. The xls are needle-like, and they are very fragile. Small amounts of manganite can be found. The silver minerals are mainly the chloride, cerargyrite, and the bromide, bromylite, along with some native silver."

NEW YORK—From the Terrace Mountain strontianite mine at Schoharie, Schoharie Co., N. Y., we have a snow-white mass of strontianite in dark gray compact limestone. This fine specimen was sent in by Minerals & Gems, P. O. Box 8072, Albany, N. Y.

In the March-April 1959 issue of R&M, on p. 123, under New York, the locality was left out for the very interesting pyrite on lustrous black biotite that was found by Don Presher, President of the R&MA. The locality is the famous magnetite mine at Tilly Foster, Putnam Co., N. Y. Our apologies are extended to Mr. Presher—it was a complete oversight—no one in the offices of R&M spotted the omission until after the issue came off the press and had been mailed!

NORTH CAROLINA—"The enclosed specimen was taken from a Triassic formation about 10 miles from Durham (Durham Co.), N.C."—on label of specimen that was sent in by O. F. McCrary, State College Station, Raleigh, N. C.

The specimen is a nice mass of dark brown chalcedony that should take a good polish.

NORTH DAKOTA—"On a recent trip to North Dakota I obtained some nice specimens of fossil grass. I believe the name 'fossil grass' is correct as I have also heard it called 'agatized sea bottom'. I am sending you a specimen.

"This rock came from Bowman County, N. D., approximately 5 miles north of the town of Bowman. I have extra specimens of this rock and would be glad to trade with collectors.

"I am planning a trip back to North Dakota this summer and hope to find something else to send you."—letter dated Jan. 3, 1959, from Charles M. Schafer, 3129 N. 60th St., Omaha 4, Nebr.

The mineral duly arrived (also a small tumbled specimen) and it was a very nice piece of dark gray, banded, fossilized chert. As minerals from North Dakota intrigue us, the tumbled specimen was sent to the University of North Dakota (Dept. of Geology), Grand Forks, N. D., for their examination and comments.

The following letter, dated Jan. 29, 1959, comes from F. D. Holland, Jr., Asst. Prof. of Geology.

"I have at hand your specimen from Bowman County, North Dakota. Unfortunately, we are not able to identify this specimen for you definitely. It is, as you say, fossiliferous chert or chalcedony. The irregular markings are most likely caused by algae, hence I would simply label this specimen, fossil algae in chert. It is definitely not 'fossil grass', nor is it 'agatized sea bottom'. This material most likely came from the White River formation of Oligocene age for there is a good bit of chert or siliceous banded limestone in this formation. Although there is none exactly five miles north of Bowman as you suggest, it crops out not far distant. The White River formation, however, is entirely of fresh water. It was laid down by streams meandering to and fro over a flood plain of low relief, and/or in lakes and ponds which were entirely fresh water. Neither it nor the underlying Tongue River formation are in any way marine, hence the algae preserved in this specimen are probably fresh water algae."

OHIO—From the Lomoziks, Forest Drive 10, Brunswick, Ohio, we received the following note, dated Feb. 14, 1959.

"This note is to inform selenite collectors that the collecting area in Ellsworth, Mahoning Co., Ohio, is closed tight by the owners of that land. We have some nice xls from this locality that we would be glad to trade with collectors. For micro-collectors we have some unusual needle-point selenite xls in clay matrix."

OKLAHOMA—"Mr. & Mrs. C. Carpenter, friends of ours, have found some unusual pebbles. These were found west of Buffalo, in Harper Co., Okla. I am sending you a few, will you please tell me what they are?"—Letter from Mrs. A. H. Huckaby, Box 126, Selman, Okla.

The pebbles turned out to be brownish claystone concretions varying in size from tiny up to ½ inch in size—all rounded and mostly singles, a few in groups of 2 and 3.

OREGON—From East Lake, Deschutes Co., Ore., we have a dark gray (almost black) glassy mass of obsidian that was sent in by Mrs. Inez O. Rogers, P. O. Box 184, Oakridge, Ore.

"All of the obsidian here is black and most of it this type, tho some is gem quality."—on label.

PENNSYLVANIA—In the Jan-Feb 1959, R&M, on p. 12, we mentioned limonite pseudo after pyrite xls that we received from Mrs. Ethel Guinter, 1203 E. Springgettsbury Ave., York, Pa. Here is a letter from her.

"This hobby of collecting rocks and minerals is comparatively new to us and we know so little but do enjoy it.

"Here in York (York Co.), Pa., we have the limonite pseudo after pyrite xls. We have found these xls in many sizes and shapes all within a radius of 4 miles from our home. We have found

very small ones and up to 1½" on the side —loose, singles, and in clusters. Not long ago we found some rather perfect ones— 1 inch square ones. At a new road cut we found 2 inch masses of it, few well shaped but big gobs of it. Some are brown clear through, and others are silvery inside. These aren't pretty but interesting. If you have room in R&M sometime, I'd like you to tell us how they were formed.

"Can you tell me if limonite pseudo after pyrite is common? They are so abundant here, we even dig them up in our flower beds I would like to trade them for other minerals, with collectors. We find silver colored and gold colored pyrite in a new road cut here.

"We have access to green marble from Delta, Pa."

Limonite pseudo after pyrite is quite common and in some areas it is extremely plentiful and of good quality. The mineral was originally a brassy-yellow pyrite crystal, then it began to change on the surface into a dark brown limonite and the change continued deeper and deeper into the crystal until it was all limonite. Even if the crystal has completely changed into limonite. the crystal form is that of pyrite. If the pyrite has not completely changed, the inside of such a crystal has a brassy color.

RHODE ISLAND—Colorless transparent quartz containing needles of black amphibole from Cumberland, Providence, Co., R. I., was formerly cut as a gem. The granite quarries from which this came have long been idle.

SOUTH CAROLINA—Tommy Brockman, Rt. 1. Greer, S. C., sent in the following item:

"Loose black tourmaline xls are found in Sharon Methodist Church ground, about 3 miles west of Reidville, Spartanburg Co., S. C. (about 10 miles below Greer)."

Send in some more items, Tommy. We can use them.

SOUTH DAKOTA—"About 4 miles west of Yankton (Yankton Co., S. D.), on Gavins Point Dam Road, about ¼ mile before the last entrance to the dam, on the right hand side of the road is an abandoned brickyard with accompanying clay pits. These pits are dug in Cretaceous formation, therefore quite a variety of fossils can be found—*ostrea congesta, inoceramus, mosasaurs,* fish scales, and others. Minerals here are selenite, calcite, some pyrite, and limonite."—item sent in by James Allen (Allen's Minerals), 322 W. 23rd St., So. Sioux City, Nebr.

TENNESSEE—"At the Lynwood quarry off of Lynwood Blvd. between Abott Martin and Hobbs Road in Nashville (Davidson Co.), Tenn., I have found a most unusual occurrence of fossil cephalopods in a layer about a foot to 1½ foot thick. The cephalopods are so thick that in this layer is about ½ rock and ½ cephalopods. John Hollis of Nashville is the proud owner of a cephalopod from here 2 feet long!

"The cephalopods alone would be interesting but the centers of many of these fossils contain a variety of crystals. Some of the crystals that I have found from here include: clear calcite, yellow to purple fluorite, brassy-yellow pyrite (small), beautiful sky-blue celestite, and pink, curved dolomite. Fibrous and massive blue celestite is also found here. The fibrous variety *will cut* and I have some very nice pieces of this variety in my collection.

"Perhaps, someday, I could expand this into an article for your Fossil Department."—item sent in by Carl Seyfert, Jr., Box 1803, Vanderbilt Univ., Nashville, Tenn.

TEXAS—Zelma Wright, Jr., 3105 Dundalk Ave., Baltimore 22, Md., sent in 3 specimens of opalized wood that had been collected by his brother, Richard Wright, Box 162, Tomball, Texas. These are beautiful specimens. One is brown and white, another dark brown and black, the 3rd a translucent brown and gray.

"Collected near Montgomery, Montgomery Co., Texas. Better specimens occur near Bedias, Grimes Co., Texas."—on label.

UTAH—"Jerico (Juab Co.), Utah. There has been a great deal of agate taken from this area. You can hunt to the east into the hills."—courtesy of Ken Stewart's Gem Shop, 37 South West Temple, Salt Lake City, Utah.

VERMONT—From Milton E. Ailes, Box 36, West Danville, Vt., we have a specimen of dark gray schist in which are imbedded thin, dark brown xls of staurolite. The locality for this interesting specimen is West Danville, Caledonia Co., Vt.

VIRGINIA—"A visit to the pegmatite deposit at Amelia C. H. (Amelia Co.), Va., last summer, proved most interesting in spite of the heat—it was also Friday, June 13th. Mineral specimens typical of this pegmatite were collected including the platy variety of albite (cleavelandite), rum colored muscovite, smoky quartz and microlite (which proved to be slightly radioactive) in cleavelandite. Amazonite was quite plentiful although partly leached and of a mottled green color—small cleavages of good color, however, could be picked up and were plentiful especially around the one pegmatite opening which was filled with water.

"Also had the opportunity to meet Mr. Balzley who is now operating the deposit. The re-opening of this famous locality should prove of interest to all mineral collectors as there are undoubtedly many more fine minerals yet to come out of the Amelia pegmatites. With a little help from Mr. Balzley the writer was able to acquire some of the unusually phosphorescent variety of fluorite—chlorophane, as well as a small crystal of columbite-tantalite and some of the orange-red spessartite garnet."—letter dated Jan. 4th, 1959, from Sidney W. Poole, 1346-22nd St., N.W., Canton 9 Ohio.

WASHINGTON—"The item 'Gold in his Garden' in the Nov-Dec 1958, R&M, p. 520, reminds me. During my 60-odd days in Alaska this past summer, I, for the first time in years tried to rediscover a reported placer gold find by an Eskimo reindeer herder, Circa 1914. Never found a color, and found a scarcity of gold nuggets for sale, elsewhere.

"But Mrs. Waskey, working in our garden here in Oakville (Grays Harbor Co., Wash.), the soil of which is in great part glacio-fulviatile gravel, found a 148.8 grains troy placer gold nugget! As soon as I arrived home in late August, I confirmed her identification. But it seemed so unlikely that a chunk of 19.3 S. G. could have been resting so close to the surface in such material that I had to have it tested in Aberdeen, some 40 miles away, before I would believe the testimony of my own eyes. Another evidence that gold is where you find it and that there is no place like Home!"—letter dated Dec. 9, 1958, from Frank H. Waskey, Oakville, Wash.

WEST VIRGINIA—Some months ago Fran Schiller, Luke, Md., found some brown, xline calcite on the top of a ridge 1 mile west of Keyser, Mineral Co., W. Va.

WISCONSIN—From Mineral Point, Iowa Co., Wisc., we have an interesting specimen of drybone (smithsonite) that was sent us by Lyle De Rusha, RR 4, Chippewa Falls, Wisc. Drybone is a miner's term for an earthy, friable carboate of zinc (smithsonite).

The specimen received is a dark brown, cellular mass, 5 x 6 inches in size.

WYOMING—Bloodstone, consisting of small spots of red jasper in green plasma, occurs north of the Rattlesnake Mountain in Natrona County, Wyo.

AUSTRALIA—"The enclosed are some of the stones at one time famous as 'MacDonnell Range Rubies'. However, they do not come from that but from a

neighboring range in Central Australia and, as you can see, are not rubies but pyrope-almandite garnets. Some of these garnets are cut into quite large, clear gems. A Mrs. Jenkins at Alice Springs, Central Australia, is the dealer who sold them. My sister was touring there last week and sent them to me to forward on to you.

"Sister stayed in the Mount Gillen Hostel there, where the aboriginal artist, the painter Namatjira, has some land as a government grant. She was having a look at the 1,100 ft. high Ayer's Rock, a real tourist attraction, and was greatly struck by the red colours of the rock and all the scenery around, all bearing that polished look known to geologists as 'desert varnish.' In the clear desert air there were views to be had of the Rock at sunrise, midday, sunset and moonlight. Her comment was that it was all most striking and was of the same vivid colouring as the Arizona 'Painted Desert' and was worth going a long way to see.

"Even the eucalyptus trees had a varnished appearance, their leaves exuding a wax with polished surface. It seems to be that tree's method of conserving its moisture in the parched area. The handsome 'Ghost Gum' with deep green leaves and snow-white bark was much in evidence. (We call all the eucalyptic 'Gum trees' here in Aussee).

"What I find most against those desert areas is their freezing, dry cold in winter time! Polar winds blow right through your ribs, straight from Antarctica.

"The garnets are found in ancient meta-seds of Ordovician age (though in West Australia we scorned to call any rock 'ancient' unless it was Archaean)! There possibly are acidic intrusions near to account for the metamorphism that created them. Not much detailed geology has been done in that region."—letter dated July 23, 1958, from Kelvin Greene, YMCA Pitt Street, Sydney, Australia.

Three nice dark red garnets were received.

"Garnets from Alice Springs, Central Australia."—on label.

AUSTRIA—Black magnetite, green olivine, green apatite, and green calcite, all have been found in mountain leather at bottom of cliffs at Rothenkopf, Zillerthal, Tyrol, Austria. Only the magnetite occurred in xls.

CANADA—"I am sending you a slice of material that I think may be saussurite. I got it from the eastern edge of Lake Superior, 55 miles north of Sault Ste. Marie, Mich. Am I right or is it something else?"—item sent in by Mrs. Rex Hile, 238 S. Richmond, Wichita 12, Kans.

Yes, Mrs. Hile, you are right. It is saussurite and the greenish, polished slab is a beautiful specimen.

SCOTLAND—Our very good friend, Sandy Ramsay, 1015 Aikenhead Road, Kings Park, Glasgow S4, Scotland, must still be on the sick list as we haven't heard from him for a number of weeks (see March-April 1959, R&M, p. 127). Before he got sick, Sandy sent us a most interesting and beautifully polished specimen consisting of black biotite, black melanite in a pinkish syenite.

"Biotite, melanite in syenite from Ledmore, Sutherlandshire, Scotland. Specimen collected and polished by Archie Forrest."—on label.

SPAIN—"Very nice crystals of stolzite were found in the scheelite mine at La Tala, Salamanca Prov., Spain. The stolzite is found in vugs in Silurian schist. The mine has not been worked for the past 10 years."—a note recently received from Juan Montal, Plaza Sagrado Corazon 1, Vilafranca del Panades, Spain.

NOTICE—When sending in items for this department, please give as much information as possible. If the locality is a mine or quarry, tell us its name, for what worked, in or near what town is it located, also name of the county. It is these additional bits of information that make this department so intensely interesting to readers.

MIDWEST FEDERATION MEETS JUNE 18-21, 1959 AT SPRINGFIELD, OHIO

The 19th Annual Convention of the Midwest Federation of Mineralogical and Geological Societies which is to be held in Springfield, Ohio, at the Clark County Fairgrounds on June 18 through 21st., 1959 is shaping up very well. We have been able to get some outstanding speakers, namely:

Dr. Ida B. Carmichael of Cincinnati, a teacher of jewelry making, ceramics and painting, a graduate of the University of Oregon where her dissertation was on the education of the Consumer Through Art, and also degrees from the New England Conservatory of Music, of Boston, the University of Cincinnati and others. She has studied jewelry making with Anna Riis of Norway, sculpture with Clement Barnhorn and Ernest Haswell and many, many others. She is mentioned in Who's Who of American Women. She is a world traveler and we believe will be worth coming a long way to hear.

Mr. Gus Brown of Des Moines, Iowa, the first president of the Des Moines Lapidary Society and at present chairman of Membership and Publicity committee and chairman of area participation shows committee for the Midwest Federation. He is also chairman of Geographical Boundaries Committee for the American Federation and was a judge at the last Midwest Federation Convention held at Downers Grove, Ill. He spoke at the National Convention in Denver on "Unlimited Original Design in Lapidary for you with the V-Lock" which was so well received that he was asked to repeat the talk the next day. This is the talk that he is to bring to us, plus a very large display of the unusual things he has made by this method.

Mrs. Harold St. John of Fairborn, Ohio has prepared a talk and colored slides for illustration on "The Gems of the Bible." She has given this talk many times to area church and club groups and is always well received. Mr. St. John has one of the finest Mineral Collections in this area, so she had a good source for her pictures.

Mr. & Mrs. Lester Cunningham of Chicago, who consistently win prizes for their outstanding lapidary and enameling work, will give us a talk on "Collecting of Lake Superior Agates and the Polishing of them", and will show some of their cabochons and jewelry made of this material. They are fine photographers so their slides illustrating the talk will be good. Mr. Cunningham will also cover the essential basic steps necessary for doing a first class job of cutting and polishing.

Mr. Edwin Goff Cooke of Chicago, is another camera fan whose forte is Southwestern Archeology and the Landscape Geology of the North American Cordillera. He is constantly adding new material to his collection and if you heard and saw him in Chicago several years ago, you will want to hear him again, for his material is all new.

Last but not least, we are hoping to have Mr. Adolf Rahm of Fairborn and Japan to relate his experiences in the Oriental gem markets and to show some of the art treasures he is to bring back with him. He is still in Japan, but his tour of duty should end about the first of May, which will give him time, we hope, to get ready for his program for us.

Aside from the above, there will be almost continuous working demonstrations of the lapidary work. We, The Miami Valley Mineral and Gem Club, will be assisted by the other Mineral & Gem Clubs of Ohio. They have all been most helpful and cooperative. There will be a large number of fine dealers with everything to sell that you might need for your hobby. We have 45,000 square feet of space and it looks as though it will be well filled. There will be some outstanding special exhibits among which will be some stone necklaces from the Smithsonian. The Midwest clubs are all invited to send a display to be entered in competition with each other. There will be adequate rest areas provided, something which is often missed at a large convention. We are planning benches in strategic spots, backed by greenery and flowers to make it more restful. The grounds are smooth and there will never be a traffic problem. The Fairgrounds are on State route 70 which is just a short way from U. S. 40, where you will find plenty of motels and restaurants. A very nice menu has been prepared, all meals including breakfast, will be served as well as lunches and snacks.

About Field Trips, it is going to take some doing to arrange the ones we hoped for. However, our Chairman is busy contacting private property owners at Flint Ridge, so we are hopeful that a trip over

there can be arranged. There will be a trip or more, if wanted, to the fossil areas in southwestern Ohio, and in the planning stage is an unconducted gold panning expedition. This is, unconducted from here to Indiana, but guided after reaching a designated rendesvous. This will be planned for after the Convention closes, as it is too far to make a round trip in one day.

One of the high lights of the Convention will be the Annual Banquet, which promises to be "filling" from the standpoint of entertainment as well as good food. All banquet reservations should be sent to Mrs. Paul Eichelman, 814 E. Cecil St., Springfield, Ohio not later than June first.

There is still the possibility that we will have someone chipping arrow points as the Indians did out of our native jaspagate from Flint Ridge, and in conjunction with this, there will be some authentic Indian dances. There will be a Swap table, but no tail gate selling. Ohio has a sales tax which requires the pre-purchase of sales tax stamps which are given out when a sale is made. If you have a travel trailer, bring it, as we have trailer space at the fairgrounds. For Motel and Hotel reservation, we suggest that you consult your AAA book and make your own EARLY. For further information, we invite you to write Mr. Fred Rentzel, 687 Beechwood Ave., Columbus, Ohio, the General Chairman or the Miami Valley Mineral & Gem Club Liaison representative, Mrs. James W. Riley, R. D. 2, Dialton Rd. Springfield. WE'LL SEE YOU AT THE SHOW.

Howard Core—Publicity
Box 442
West Liberty, Ohio

Collector's Corner

For the special benefit of collectors who may be living in areas far removed from other collectors we have opened this feature. In this corner, a collector may have his name and address listed for the purpose that other collectors may write him in the hope that through correspondence, exchange of ideas and specimens, new friendships may be formed. Listings are free.

Gary L. Powers, 1126 E. 3rd Ave., Mesa, Ariz.

Mr. & Mrs. E. J. Bentsen Rt. 1, Box 508, Delhi, Calif

Benj. L. Handley, 114, Clio, Calif.

Dwight Weber, 328 N. Louise St., Apt. 9 Glendale 6, Calif.

Claude A. Potter, Box 115 Hemet, Calif.

CWO Vernon R. Braun, 9004 Rosewood Drive, Sacramento 19, Calif.

Mrs. John Branch, 3820 Ridge Ave., Tampa 3, Fla.

P. W. Hostun, 5235 Attleboro Ave., Jacksonville 5, Fla.

Mrs. Bertha Lawrence, 2311 Arcadia Dr., Miramar, Hollywood, Fla.

George & Velma Wyatt, 2002-57th, Tampa 5, Fla.

Louis C. Davis, 505 S. Slappey Dr., Albany, Ga.

Maurice Lamb, Niota, Ill.

Jim Jackson, 24 Oakwood Dr., Prospect Hts., Ill.

Frank Acuff, Jr., (12 yrs.) CMR 83 Bartonville, Ill.

Rudolph V. Frana, 1741 N. Keeler Ave., Chicago 39, Ill.

Paul L. Doggett, 950–65th St., Des Moines 16, Iowa

Mrs. Bryce Allen, Box 486, Tribune, Kans.

Malcolm Arnett, RFD 1, Box 253, Corydon, Ky.

Nelson Garner, RR 2, Sharpsburg, Ky.

Mrs. Valentine Lippold, R. 2, Dexter, Maine

Norman Dubie, Jr., 214 Cedar St., Bangor, Me.

Timothy K. Beck, 9 Arthur Rd., Andover, Mass.

Leslie R. Clift (11 yrs.), N. Main St., Raynham Center, Mass.

Larry Smith (12 yrs.), 2051 Clyde Park S.W., Grand Rapids, Mich.

Walter Kalata, 100 Shamrock St., Ironwood, Mich.

Cheryl Miller (12 yrs.), 508 Orange St., Concordia, Mo.

Merryl & Mary McCoy, RR 3, Kahoka, Mo.

Tod Ashmun (11 yrs.), 2640 Sewell Lincoln, Nebr.

Jack Ryason, Box 245, Bridgeport, Nebr.

David Klinshaw (11 yrs.), 153 Oakland Ave., Audubon 6, N.J.

Mrs. Lucille Outwater, 140 Perrin Ave., Pompton Lakes, N.J.

Mr. & Mrs. John T. Swift, 955 Beatty St., Trenton 10, N.J.

L. Michael Kaas, 18 N. Mansfield Ave., Margate City, N.J.

William M. Lemmon, 2023 Grove St., Brooklyn 37, N.Y.

Mrs. Dorotea M. Rowe, RD 1, Nassau, N.Y.

Robert E. Bedford, 14 E. Main St., Johnstown, N.Y.

John Tutaro, 221 Busti Ave., Buffalo 1, N.Y.

Ralph W. Caton, 51 Valley St., Concord, N.C.

T. D. Burns, Rt. 1, Box 299A, Matthews, N.C.

Myrtle Gentry, Rt. 1, Dobson, N.C.

R. L. Brown (13 yrs.), Rt. 1, Dobson, N.C.

Wilber Carpenter, Rt. 1, Dobson, N.C.

R. S. White, Jr., 2619 Woodvale Dr. Winston-Salem, N.C.

Mr. & Mrs. Harold Heely, 16317 Corkhill Rd. Maple Hts., Ohio

Allen E. Marks, 12215 Ashbury Ave., Cleveland 6, Ohio.

Robert M. Maher (14 yrs.), 1149 Parkway Drive, Columbus 12, Ohio

The Lomoziks, Forest Dr. 10, Brunswick, Ohio

F. H. Chenevy, 727 S. Mill St., Orrville, Ohio

David Belusko, 776 Grant St., Hazleton, Pa.

Richard C. Haefner, 217 Nevin St., Lancaster, Pa.

Mrs. Walter Dundorf, Jr., 445 Valley St., Marysville, Pa.

David A. Hoff, 5152 Park Ave., Bethel Park, Pa.

Thomas Petro (16 yrs.), 905 Meade St., Reading, Pa.

C. Nicholas Speltz, 1917 Foster, Memphis 14, Tenn.

Edward Helpenstell, 1429 Sandpiper Dr., Houston 36, Texas

T. Nichols, Rt. 4, Bowie, Texas

V. Sabin, 723 Steves, San Antonio 10, Texas

Larry Volkert, 54 N. Pleasant St., Middlebury, Vt.

Ben Marshall, P.O. Box 926, Amelia, Va.

J. E. Rawles & Jimmie, 51 Green Oaks Road, Newport News, Va.

Rudy J. Bland, Jr., 3218 Rueger St., Richmond, Va.

Bob Brock, 315 E. Commercial St., Appleton, Wisc.

Robert Easton, 25 Lascelles Blvd. Apt. 204, Bldg. 4 Toronto 7, Ont., Canada

Douglas Scott, Markham, Ont., Canada

Mr. & Mrs. W. F. Erichsen, 2075 Lansdowne Rd. Victoria, B.C., Canada

Mrs. B. Gartrell, Rubyvale P.O., Central Queensland, Australia

OREGON ROCKHOUNDS SHOW—OPERA CONFLICT

Editor R&M:

I am sending you some clippings from Portland, Oregon, papers which I believe may be of enough general interest to be worth a story in ROCKS AND MINERALS. I doubt that any rock show has ever before received as much advanced publicity in its local press as has been given to the National Gem Fair, and while it centers about a controversial issue between our Oregon Centennial Commission, the San Francisco Opera, and the Oregon Agate and Mineral Society we have been successful in getting a fair presentation of our own position so that the publicity is very favorable to us.

Although the news items may give most of what is needed for a story, it may be helpful to you if I summarize briefly the issues concerned:

1st. The Oregon Agate and Mineral Society began to plan for the National Gem Fair over a year ago. One of our first steps was to have a committee negotiate with the Portland Centennial Commission for space in the great building which will house an International Trade Fair. Although we had at one time a verbal agreement for space, the Commission later broke its word to us, and we had to make new plans. It was at this point that we leased the Portland Civic Auditorium.

2nd. For a whole year our Society has been developing its plans for the National Gem Fair. Dealers have leased space and the various committees for special exhibits, program features, caravans, etc. have completed plans for the best show that we can present to the Rockhounds of America.

3rd. Recently the Fine Arts Committee of the Oregon Centennial voted 5-4 *against* inviting the San Francisco Opera to present performances in the Civic Auditorium during the Labor Day week end. Immediately following this announcement there was an angry outcry from many opera lovers who bitterly criticized the Fine Arts Commission.

4th. In this controversy no one had taken the trouble to notice that the Rockhounds of Portland had leased the Auditorium for these dates.

5th. Our Committees in charge of the Gem Fair immediately drafted letters to the Centennial Commission and personally contacted city officials and others who should know about our prior claim to the Auditorium.

6th. The Oregon Centennial Commission, responding to the pressure of embattled opera lovers, reversed its Fine Arts Committee and invited the San Francisco Opera to Portland. The newspapers at this time mentioned that there was a question as to whether the Auditorium was available.

7th. The Oregon Agate and Mineral Society now moved to make its position unmistakably clear:

a) One of our members, Mr. R. L. McGrew who is a Past President of our Society and an attorney, reviewed our leases and determined that they were legally binding.

b) Mrs. Richard Rice, Manager of the National Gem Fair, wrote a letter to the Portland newspapers carefully documenting our position and delivered it to them personally.

c) Officials of the Fine Arts Committee and the Centennial were personally approached and briefed by members of our Society.

d) In all of these actions we stressed these facts: that we have no quarrel with opera, that many of our rockhounds are music lovers, that we doubted that a rock show and opera could be successfully mixed in the same building.

8th. Now the newspapers began to present our side of the story and the *National Gem Fair* became headline news in Portland.

9th. Result—The National Gem Fair will be held in the Civic Auditorium. The San Francisco Opera will be staged in some other building if held.

I hope that you will find it possible from all of this to present a news story concerning the National Gem Fair. As Publicity Chairman for the show it was a little like living through a dream come true. I know that the publicity we have had will assure us of strong local attendance at the National Gem Fair.

Minnie Gilbertson
Publicity Chairman
1925 S. E. 6th Ave.
Portland 22, Ore.

MAINE CLUB COOPERATES WITH PROPERTY OWNERS!

Editor R&M:

I have been asked to write to let you know of the effort being made by the Maine Mineralogical & Geological Society to help mine owners and operators, more especially here in Maine, in their constant struggle with inconsiderate collectors and visitors.

Being one of the more prominent mineral societies in this part of the country, many of the mine owners and operators voice their woes to us in the hope that our influence with rock collectors will help to ease the difficulties they experience more and more each year.

In this connection, the society appointed a committee, with Miss Marion Banks as chairman, to revise and publish as widely as possible a new set of Rules to Govern Rock Hunters, and this committee has come up with the rules of which a copy is enclosed.

Members of our own society are pledged to be governed by these rules and it is hoped that others will voluntarily accept them. In their own as well as our interests they must be rather generally accepted, or mines and quarries will be closed to all of us.

We have had very good luck in securing permission to visit mines and quarries here in Maine; but it is becoming more frequent that we are told that the last group who visited a particular property, totally disregarded the common rules of good conduct and that permission is being granted more reluctantly than ever before.

Stories to the effect that we are pledged to these rules have appeared in numerous publications here in Maine and copies of these publications are made available to mine owners and operators, with the result that when a member of this society presents his membership card, he is frequently better received than before and some of the ill will created by disregard for the mine owners' rights has been overcome.

We don't like to seem inhospitable, nor do the owners and operators; but shabby conduct by many, from Maine as well as the out-of-state visitors, make it necessary that something be done to preserve this privilege that so many of us enjoy and hope to keep on enjoying.

Mr. John Rand, State Geologist, of Maine, has enthusiastically endorsed the effort being made to promote better cooperation by all with the mine owners and operators and feels that these efforts properly continued will do much to relieve the reluctance to let visitors into properties here in Maine.

As you no doubt know, we don't have the finest collecting here in Maine that can be found, but we do have considerable variety and some of the most interesting hunting to be found anywhere; and we would all like to keep at it for a long time to come. With cooperation from those who do enjoy the privilege, it may be possible to add some nice specimens to many collections.

Having fulfilled my duty in regard to the above, I would like to add that the society is still active and conducts some sort of instruction or information as part of each monthly meeting, and that we welcome visitors, who we hope will see fit to join us, at our monthly meetings at the Beach Museum, 1241 Forest Avenue, Portland, Maine on the last Friday of the month September thru May at 8:00 P.M. We would be very happy to find that *you* might be in a position to visit with us at any time.

Leon A. Carpenter
Corresponding Secretary
Maine Mineralogical &
Geological Society
136 Main St.,
Gorham, Me.

RULES FOR MINERAL COLLECTORS

1. Permission should always be obtained from the owner before entering a mine or quarry. The dumps are usually open to collectors, but permission should be obtained each time.

2. At many mines, the operators have stock piled certain minerals to be hauled away to market at a later date. It may appear to you that these are worthless masses of rocks, but remember that it took many man-hours of labor to amass these stock piles. Do not touch these specimens. If every visitor took only one each, the loss to the owner could be very great by the end of the season. If you see a specimen you would like ask the mine owner if you may buy it. Rockhounds have a reputation for honesty, and wish to keep that reputation untarnished.

3. Quarry tools are sometimes left by workmen while work is temporarily halted.

Be courteous and leave them where they are. Visitors are urged to have and use their own tools.

4. Visitors are asked not to throw rocks into pits. When working the dumps care should be taken that rocks or boulders do not tumble into pits. Clearing a deep pit is costly and the owners' rights should be respected.

5. Do not tunnel under or trench across a road. Though it may seem to be an abandoned road now, the operator may wish to use it again, should he resume or expand operations.

6. Digging under quarry or dump walls should be avoided. Steep walls are treacherous and it is best to avoid them.

7. Do not interfere with workmen. Always make your presence known to men working in mines. Should blasting take place, they will know you are about. Find out what time they are going to blast and be out of the area by that time. It takes time away from other duties if crew are compelled to round up visitors before a blast. Be cooperative. If you hear someone yell "Fire", take cover immediately.

8. If there are gates to keep cattle or other animals in a pasture or from wandering into mines or quarries, be sure you leave them as you find them.

9. Never leave your car parked on a mine or quarry road. The operators may need to use it and not be able to get by.

10. Always ask mine owners where you may or may not collect specimens. Remember, you may want to come again and somebody else surely will want to.

VISITING ROCKHOUNDS WELCOME

The following subscribers would be delighted to have rockhounds call on them when passing through their cities. If any one else wants his name added to the list, just let us know.

John J. Brown, 5016 E. Broadway, North Little Rock, Ark.

John & Clara Roder, ½ mile south of junction Hwy. 7 north & 70 between Hot Springs & Little Rock, Ark.

CWO Vernon R. Braun, 9004 Rosewood Drive, Sacramento 19, Calif.

Mr. & Mrs. E. J. Bentsen, Rt. 1, Box 508, Delhi, Calif.

Mac & Maggie McShan, 1 Mi. west on Hy. 66, Needles, Calif.

Porter, A. W., Pepperwood, Calif.

O. A. Reese, 806 E. Boulder St., Colorado Springs, Colo.

Randall Bohmer, 208 Warren St., New Britain, Conn.

Mrs. John Branch, 3820 Ridge Ave., Tampa 3, Fla.

P. W. Holstun, 5235 Attleboro Ave., Jacksonville 5, Fla.

Mrs. Bertha Lawrence, 2311 Arcadia Dr., Miramar, Hollywood, Fla.

Louis C. Davis, 505 S. Slappey Dr., Albany, Ga.

C. K. Henning, Union Pacific R.R. Shoshone, Idaho, (Phone 6011)

Maurice Lamb, Niota, Ill.

John H. Kaiser, East 3rd St., Sheridan, Ill.

Susan Tranter, 2 E. Walnut, Sharpsville, Ind.

John Burmeister, Preston, Iowa

Paul L. Doggett, 950–65th St., Des Moines 16, Iowa

Mrs. Bryce Allen, Box 486, Tribune, Kans.

Mr. & Mrs. Toivo Puranen, Ellis Rd., RFD 2, Box 67, Westminster, Mass.

Lawrence J. Eddy, 359 Midland Ave. Ironwood, Mich.

Rev. Luke McMillian, 742 Comfort St. Lansing 15, Mich.

Merryl & Mary McCoy, RR 3, Kahoka, Mo.

Jack Ryason, Box 245, Bridgeport, Nebr.

Rev. M. Everett Corbett, Acworth, N.H.

James B. Moore, West St., Antrim, N.H. Phone 154

Mr. & Mrs. Rudolph Arp, 99 Mountainside Terr., Clifton, N.J.

L. Michael Kaas, 18 N. Mansfield Ave., Margate City, N.J.

Lt. Virl E. Haas, 17 Tryon Ave., Teaneck, N. J.

Mr. & Mrs. John T. Swift, 955 Beatty St., Trenton 10, N.J.

Clyde D. Thomas, 853-57th St., N.W., Albuquerque, N. Mex.

Vernon Haskins, Curator, Durham Center Museum, East Durham, N.Y.

Edward B. Thomas, 26 John St., Owego, N.Y.

Leonard Mackey, Box 175, South Colton, N.Y.

Ralph W. Caton, 51 Valley St., Concord, N.C.

Burl H. Van Dyke Rt. 1, Boone, N.C.

Waldo Blair, 1777 E. 31st St., Lorain, Ohio.

Mr. & Mrs. F. H. Dunsmoor, 1260 Mahoning Ave., N.W. Warren, Ohio.

Mr. & Mrs. Harold Heeley, 16317 Corkhill Rd. Maple Hts., Ohio.

Mrs. Daisy Lynn, 204 E. Dalton, Hugo, Okla.

J. P. Cessna, 218 Baltimore St., Gettysburg, Pa.

Mr. & Mrs. A. B. Carson, 12 Cateechee Ave., Greenville, S.C.

Rev. Theo. H. Judt, 520 N. Washington Ave. Scotland, S.D.

Edward Helpenstell, 1429 Sandpiper Dr., Houston 36, Texas

T. Nichols, Rt. 4, Bowie, Texas

V. Sabin, 723 Steves, San Antonio 10, Texas

Larry Volkert, 54 N. Pleasant St., Middlebury, Vt.

Nelson R. Longe, 5 Leonard Ave. Springfield, Vt.

Rudy J. Bland, Jr., 3218 Rueger St., Richmond, Va.

G. W. Weber, 1320 Portland Ave., Walla Walla, Wash.

Lyle De Rusha, RR 4 Chippewa Falls, Wisc.

Herman Kraege, Lima Center, Wisc.

Mr. & Mrs. C. O. Garriott Box 1, Sand Draw, Wyo.

Douglas Scott, Markham, Ont., Canada.

Mr. & Mrs. W. F. Erichsen, 2075 Lansdowne Rd. Victoria, B.C., Canada

Obituary Notices

Oscar Bodelsen

Oscar Bodelsen, fifty-seven, of 90 Grove St., Mount Kisco, N.Y., was stricken while dancing with his wife. They were attending a dance sponsored by the Ancient Order of Hibernians, Sat. March 14, 1959. He was pronounced dead shortly after 1:00 a.m., Sunday, March 15th.

Mr. Bodelsen, a druggist, lived in Mount Kisco for some 30 years, his drug store was at 219 E. Main Street. He was a noted mineral collector specializing in silver minerals.

Our heartfelt sympathy is extended to Mrs. Bodelsen on her great loss—she had a most devoted husband, loyal and true and yet a humble man. May our dear Lord be with her always.

Mr. Bodelsen was a warm friend of the Editor (they had been on many trips together) and so his sudden death is a shock and a great loss.

Morris J. Elsing

Morris J. Elsing, a retired mining engineer, passed away a few weeks ago after a brief illness. He, with his daughter, Mary, conducted the Collectors Shop, 95 Camino Espanol, Tucson, Ariz.

Our sincere sympathy is extended to Miss Elsing—our best wishes also for her determination to carry on the Collectors Shop. May she have the strength and courage to carry on, alone.

Mrs. Mabel B. Carpenter

Mrs. Mabel B. Carpenter, of Springvale, Maine, died Feb. 4th, 1959, due to a heart condition. She was born Sept. 9, 1878, in Buxton, Maine.

She had a very fine mineral collection which is to be sold complete. If anyone is interested in the collection, contact Mrs. Lawrence Carpenter, Springvale, Maine.

THE MICRO-MOUNTER

Conducted by Neal Yedlin—129 Englewood Drive, New Haven, Conn.

We are fortunate in having been invited to address the Walker Mineralogical Club of the University of Toronto in March. A fine group of collectors, and their enthusiasm is matched only by their willingness to go off into the "bush" to seek the ever-elusive perfect mineral specimen. We discussed the m/m phase of collecting, showed photographs of specimens in our collection and demonstrated the basic techniques of m/m production.

Many thanks to Dr. V. B. Meen of the Royal Ontario Museum, and to the officers and members of the club for a warm and hospitable welcome.

Go to Toronto if you possibly can. Get to the museum and visit the earth science section. There await you a superb mineral collection and geology exhibit. The latter leads you step by step from origins to the present. With some spectacular things by the wayside.

Needless to say the mineralogical museum has placed emphasis on Canadian mineralogy, without, however, neglecting the rest of the world. A visit here is a must before collecting in Canada.

Correction: Reference to notes anent the Pennsylvania Mineral Society show at Doylestown last year indicates an error on our part in reporting the winners of the m/m competition. They were: First, Paul Seel; second, Leonard Morgan; third, William Hunt; honorable mention, William Yost and Edna Hunt. We're glad to put it straight. Our sincere apologies.

For a number of months now Canaday Micromineral Co., P. O. Box 26, Clarksdale, Arizona, has advertised in ROCKS AND MINERALS, and has supplied the discriminating collector with really good material. Prices are most reasonable. We got some of the things advertised. Really nice. How about such things as chalcocite xls, shattuckite xls, natrochalcite, sphene, osumulite, hinsdalite, smythite, libethenite and others at prices from 75 cents! So far as I can tell from my contact and correspondence no inferior specimen leaves their establishment. Send for their list, and please make a habit, when so doing, of enclosing postage. It surely is worth 4 cents to know what a dealer has in stock.

Some recent acquisitions:

Proustite—Cobalt, Ont.
Cobaltite—Cobalt, Ont.
Skutterudite—Cobalt, Ont.
Smaltite—Cobalt, Ont.
Silver—Cobalt, Ont.
Polybasite—Cobalt, Ont.
Uranophane—Faraday Twp., Ont.
Bornite—Lake Superior, Ont.
Millerite—Temagami, Ont.
Uvarovite Garnet—Orford, Quebec, and Polycarpi, Greece
Anatase—Binnenthal, Switzerland, and Pfitsch, Tyrol
Sphene (Golden Twin)—St. Gotthard, Switz.
Kammererite—Erzegum, Turkey
Topaz—Schneckenstein, Saxony
Argentite—Zacatecas, Mexico
Atelestite on Eulytite—Schneeberg, Saxony
Linarite—Socorro Co., N.M.
Linarite—Tiger, Ariz.
Caledonite—Tiger, Ariz.
Bixbyite—Sierra Co., N.M.
Pseudobrookite—Sierra Co., N.M.
Hauerite—Salt Wells, Ala.
Arsenopyrite—Cornwall, England
Danburite—Mexico
Ajoite—Pima Co., Ariz.
Realgar—Naples, Italy
Kermesite and Valentinite—Arechuybo, Mex.
Diamond (Black Cube)—East Africa
Cuprite—Tsumeb, SW Africa

Some of these were acquired by exchange. Most were purchased, with Canaday, Scott Williams, Don Ward,

Romanella, Byron, Filer, Ford and Schortmann the sources.

The response to the "third hand" bit in the last issue of ROCKS AND MINERALS was interesting and fruitful. Ray Ellis, 530 Main St., Oakville, Conn., sent us a box of ¾-inch black velvet circular discs, with press-on adhesive on one side. "Put a little Duco cement," he writes, "On the bottom of the single xl and set it in the velvet. You can move the xl in any position and it will stay. It looks beautiful and works fine." Indeed it does. Ray has a good supply of the discs. He'll swap for m/m material.

Another note from Dr. Bill Thomas, stationed at the Veterans' Hospital at Lyons, N.J. He recommends "gum tragacanth" for cementing small jobs. Druggists use it to cement labels to bottles and boxes. It dries without a trace, does not fluoresce, is not too tacky and dries slowly enough to be used in minute quantities.

We looked at some of our specimens that had not been opened for about a year. Upon the pedestals on which "Dyanshine" shoe polish had been used for blackening there appeared a grey efflorescence. This disturbed us considerably for it meant the possible ruin of the mounts. As we studied one such under the 'scope the whitish hairlike material gradually disappeared. It seemed to flow away as the light hit it. And then we understood the whole thing. "Dyanshine" contains wax. The wax had "flowered" into tiny white needles. The warmth from the lamp when the specimen was observed was enough to melt the microscopic quantity of wax. The pedestal turned black again. We tried it on half a dozen mounts. Same result. If you've used this liquid as a blackening agent, and your mounts show the same grey feathering of the pedestals, don't worry. Let your beam of light fall on the cork or balsa and the disfigurement will disappear. However, we now use "Magic Marker" a handy marking ink in a container with a long wick. Marketed by Art Goodwin, of 2524 Brookfield Ave., Baltimore, Md., one of our m/m clan.

Bill Henderson, 17 Old Kings Highway, Old Greenwich, Conn., who started m/m work while doing post-graduate work at Yale, sent some choice things he collected at the site of the new dam at Thomaston, Conn. We got wurtzite in fine stacked plates, pyrite showing cube and dodecahedron, and clear fluorite with fine tetrahexahedral habit. Extracts from his letter indicate many excellent possibilities. He says: "This is to let you know about a new "gold mine" at Thomaston, Conn. The fruitful part of the area consists of a rock dam, perhaps a half kilometer in its largest dimension. Adjoining the main undertaking are two railroad cuts and several dumps.

"The country rock, a pyrophyllite schist, contains a great deal of such species as stilbite, heulandite, calcite, quartz, galena, natrolite, prehnite and pyrite, all in fine quality m/m specimens. Present in smaller amounts are more desirable items such as pyrite in long curved xls; fluorite showing the cube, dodecahedron and tetrahexahedron; wurtzite in aggregates and stacked plates; several unknowns; and phillipsite in single xls and textbook twins.

"There is one major drawback. The grain of the schist is almost invariably perpendicular to the cavities. A trim saw is in order for about half the stuff; else the loss will be tremendous.

"Thus far I have been up there five times. Six large boxes of material have been accumulated. Going over the stuff will be a major, but welcome undertaking."

Things are getting just too, too refined in Baltimore. Some of the boys are engraving the names of the minerals right on the box covers. Horace Greene is doing it from the underside, backwards, rubbing white lead into the cuts to make the letters stand out. Reminds us of the games we used to play

(*Continued on page* 242)

CURRENT EVENTS

of the

EASTERN FEDERATION OF MINERALOGICAL AND LAPIDARY SOCIETIES

PRESIDENT
Mrs. Elsie Kane White
3418 Flannery Lane
Baltimore 7, Md.

TREASURER
Sam Brown
40 Northview Ave.
Upper Montclair, N.J.

VICE-PRESIDENT
Dr. George F. Size
Box 236
Murphy, N.C.

EXECUTIVE VICE-PRESIDENT
Mrs. James M. Dearborn
146 Lincoln St.
Newton Highlands 61, Mass.

SECRETARY
Roy E. Clark
Box 607
Newport News, Va.

1959 EASTERN GEM AND MINERAL SHOW

Plans are progressing rapidly for the Eastern Federation Convention being held in Boston, Mass., at the Sheraton-Plaza Hotel, on July 16, 17 and 18, 1959. Field trips will follow the show for several days, beginning with Sunday, July 19. Two near-by clubs will assist the host society, The Boston Mineral Club, guide tours to interesting localities for collecting, all to wind up with a New England cook-out.

Among top authorities who will lecture are Dr. Clifford Frondel, Curator of the Harvard Mineralogical Museum and co-author of the 2 volumes of the Dana System, now working on the 3rd, the Silicates. Dr. Frondel will also guide a tour of the famous Harvard Museum, and is preparing a pamphlet on the museum for presentation to banquet guests along with other souvenirs.

Dr. Judith Weiss Frondel of the U. S. Geological Survey, wife of the Curator at Harvard, who received her doctorate from Bryn Mawr College, will lecture on Gems of Organic Origin, telling of the formation and composition as well as the history and superstitions of these gem materials used since ancient times; the pearl, amber, jet and coral.

Rev. Dr. Daniel Linehan, S.J., Director of the Weston Observatory, whose lectures cover the field of geophysics as well as the geography of the Polar regions among other areas, was with the American Contingent of Scientists in the International Geophysical Year at Antarctica, on which he will lecture and show koda slides.

There will be a talk on The Story of the Boston Basin by a famous geologist of Harvard, with beautifully illustrated brochure which was done for the Children's Museum in Jamaica Plains by Dr. Erwin Raisz. There will be other prominent lecturers, announcements to be made later.

Special attractions will include crystallized and arborescent gold from the famous Burrage Collection, reported the largest and best in the world which has never before been on display. There will be gorgeous agates from the famous Bigelow Collection from Brazil and Uruguay, not previously displayed publicly; a display of gems of New England of cut acqua, blue and golden topaz and the famous Hamlin Tourmalines known throughout the world. There will be several cases of a teaching exhibit from Dartmouth and the New Hampshire State Planning Commission. Fluorescent House will have a colorful display of fluorescent minerals, with well over 1,000 specimens, requiring a separate room. Nelson K. Brown is exhibiting his collection of fluorescent minerals rated the finest in the northeastern part of the country. Mr. Brown has made a special effort to acquire specimens which are not only radiant in all the colors of the spectrum, but are of equal interest to students and collectors because of crystallization, mineral associations and general appearance. This collection contains over 100 mineral species and varieties from cabinet to museum size. Negotiations are under way for many more outstanding features.

There will be working demonstrations on gem cutting, with Henry B. Graves of Florida, carrying on a continuous demonstration of gem faceting. More club and in-

dividual displays of minerals, lapidary work, jewelry and fossils are anticipated than at any previous show, competing for trophies and prizes. Top winners in this Eastern show will be eligible to compete for prizes in the national show in Portland, Oregon, over Labor Day Weekend, and also compete for 8 national trophies now being offered by the American Federation of Mineralogical Societies.

The national trophies include the Woodruff trophy for minerals; the Parser trophy for cabochon work; the Graves trophy for faceted stones; the Bitner trophy (for Junior and Senior); the Chromy trophy for micromounts, and the George and Corrine Barclay trophies for fossils (Junior and Senior).

Commercial dealers have already signed up from California, Arizona, Pennsylvania, North Carolina, Maryland, Florida, New Hampshire. New Jersey, New York, Michigan and Indiana, promising many exciting offerings for the collector and gem cutter.

Advance registration up to June 15 for the three days of show, lectures, movies and field trips will be $2.50. Families will have a flat rate of $5.00. This will save the committee last-minute work and give some idea of how many will attend and how much the committee can do on prizes and other "goodies". After June 15, registration will be $3.00 for individuals and $6.00 for families. So get your registration in early and take advantage of the reduction.

All inquiries should be sent to Mrs. James M. Dearborn, 146 Lincoln St., Newton Highlands, 61, Mass., General Chairman.

1959 Eastern Show Chairman

Mrs. James M. Dearborn (Grace D.) of 146 Lincoln Street, Newton Highlands 61, Mass., general chairman for 1959, a charter member of the Boston Mineral Club host society, who has held an office almost every year for the past 24 years, is the only woman to serve as its president. In 1952 she was made an Honorary Member.

Mrs. James M. Dearborn, Exec. V. P. of Eastern Federation and General Chairman of 1959 Show, pointing out some rare New England phosphates to members of Hyde School Pebble Pups.

Members of the Hyde School Pebble Pups have taken mineralogy with her weekly since the second grade; also some members of the Weeks Junior High who are dismissed the last period of school for this extra curricular activity at Mrs. Dearborn's home. They study not only descriptive mineralogy, but do some blowpipe analysis, make xl models, build specific gravity balances and go on mineral trips. They exhibit in the science fair and some one of them usually gets first or second prize. Last year one boy not only had the best exhibit in the high school science fair held at the Massachusetts Institute of Technology, but won the $500 scholarship and is now at Princeton University majoring in mineralogy.

Mrs. Dearborn has been a girl scout leader and official for 28 years, and rock and mineral badge councilor of all the Norembega Council of Boy Scouts for the past 8 years. She has given innumerable talks and lectures to church groups, literary clubs, youth camps, mineral clubs, etc. Her travels have taken her across the continent 15 times, to Mexico City and environs 5 times, and to Alaska and Canada.

Her outstanding collection of over 8,000 minerals fills 8 large display cases. Two large cabinets of 40 drawers each contain most of her Dana Study collection.

Mrs. Dearborn gave up teaching 40 years ago to get married and raise a family. She has a son in California with 3 boys, a daughter in Boston with 5 children and one in Hanover, New Hampshire, with 3, making 11 grandchildren.

Her present goal: the best show ever held in the East.

Rules For American Federation 1959 Junior Essay Contest

1. Any boy or girl, 16 years of age or under as of June 30, 1959, is eligible to compete.

2. Each essay shall be entirely the work of the person entering the same.

3. The subject of the essay shall be: "The Advantages of Being a Rockhound," and shall be not more than 1,000 words.

4. Prizes will be awarded at the 1959 Convention of the American Federation at Portland, Oregon, over Labor Day weekend—September 5 through September 7, 1959. The prizes to be awarded are as follows:

First Place.....$100.00 U. S. Savings Bond
Second Place.$ 50.00 U. S. Savings Bond
Third Place....$ 20.00 Cash
Fourth Place..$ 10.00 Cash
Fifth Place.....$ 10.00 Cash

5. Deadline for mailing entries will be midnight, June 30, 1959.

6. All entries are to be addressed:
Howell Lovell, Contest Chairman
1020 Russ Building
San Francisco 4, California

7. All manuscripts submitted will become the property of the American Federation of Mineralogical Societies, to be used in any manner they may see fit.

8. The decision of the judges shall be final.

All juniors are urged to enter essays and try to win one of the U. S. Savings Bonds or Cash Prizes.

What Goes With Our Clubs

A hearty welcome to two newcomers to the Federation family, the *Piedmont Mineral Club of Greensboro*, N. C. and the *Charlotte Rock and Mineral Club*, of Charlotte, N. C., increasing our membership to fifty-two societies.

The Mineralogical Society of D. C. held their annual banquet in February, installing newly elected officers, with Isadore Adler speaking on "X-Rays Peer into the Secrets of Minerals". In March, Dr. Edward C. T. Chao, Geologist of the Geological Survey was scheduled to speak on radioactive minerals found recently in Maryland.

The Gem and Lapidary Society of D.C., Inc. had experienced members describe equipment they use for faceting stones, from the very expensive machines down to the most inexpensive, following a movie shown by their Col. Windham, in February. They scheduled their first field trip of the season in March—for a williamsite hunt. Miss Helen MacLeod was to speak on turquoise and Turquoise Fakes, in March, discussing the hazards of cutting, polishing and purchasing it. There was also open house on lapidary techniques, with the exhibit for the month including bloodstone, amethyst and jasper.

The Gemcrafters of Miami are busy creating new jewelry with mounted stones to add a few more Federation blue ribbons to their collection at the Boston show.

The Miami Mineral and Gem Society reports Dr. Russell T. Boyd, of Toronto, Canada, as speaker in February on Australian Opals. A field trip to a new location for calcite, calcified coral, shell fossils and solid replacements and other related specimens

in January was so successful it warrants a return trip. "Harvesting Time for the Wise Trophy Entries" was also announced, stating "The beautiful and much-coveted award presented by Mr. John Wise of Baltimore is presently in our possession, having been won by our society for the second time last August. As it must be won three times to be retained by the winning club, it is necessary that each and every member, I repeat, EACH AND EVERY MEMBER, brings to the next meeting one item of his or hers to be entered with the others for this competition."

This is the Membership Participation Award now being offered for the 4th year to Eastern Federation societies of over 30 members at the Boston show.

The Georgia Mineral Society, of Atlanta, had H. I. Chamberlain of the Bureau of Public Roads speak on Mineral Locations of Georgia, in February. The Gem Club had Tom French of the French Jewelry Company talk about mining stones. There was also a field trip to Tate, Georgia, for the collection of massive kyanite, smoky quartz, rutile, beryl and feldspar at 3 locations. In March they viewed a film Minerals and Rocks, subtitled Stones of the earth, with a talk by Dr. Willard B. Brant on field identification of minerals. Mrs. Nettie Donaldson spoke on Opals to the Gem Club. A field trip was held to hunt rutile, lazulite, kyanite, hematite, pyrite, biotite, limonite, muscovite and several varieties of quartz at a location east of Washington, Ga.

The Pine Tree Gem and Mineral Association voted to hold its 3rd annual Rockhound Roundup on August 1st and 2nd, just north of Roxbury Village, in Maine, where the Swift River leaves Route 17 to form a nearly circular boundary around a 50 acre level green field known as the Thomas Intervale (alternate, the new District School in the village). A list of those mines will be available where permission of owners can be obtained for your collecting pleasure. The club has gold pans for hire. Admission fee of 25¢ is for those over 16. Contact the following for further information: George Dubois, 121 Granite St., Mexico, Maine (Rumford 1168) or Mrs. Freda Thomas, Roxbury, Maine (Rumford 1529-W4).

The Gem Cutters Guild of Baltimore viewed Eastern Federation Program E in March, being colored slides of the 1958 American Federation show held in Dallas, Texas. Forty-eight states (apologies to No. 49 and 50) were covered in 2 hours on a field trip to the garage of the society's founder, James W. Anderson. Only thing needed for this trip was a sack, to be filled on a help-yourself basis. The club's octogenarian President-Emeritus Jimmie, who said he had a good time too, got his garage house-cleaned for spring in short order and all members went away laden with loot. First outdoor field trip of the season was held on April 19 to Washington County for cave onyx.

The Boston Mineral Club had John L. Stearns speak on The Fine Art of Sphere Polishing in March, with an exhibit of his art. W. Everett Berry, president of this society, showed kodachromes of Arizona mines and minerals. Meeting in the Geological Lecture Room at Harvard, in Cambridge, they were also privileged to visit both the geological and mineralogical museums.

The Newark Mineralogical Society held its 352nd meeting on March 1, with Herbert Kraft, teacher in the Elizabeth Schools, giving a talk on The American Indian and His Use of Stones. He stated the Indians started rockhounding about 1000 A. D. Field trip to Chimney Rock Quarry was announced. Specimens of rocks to be found there were displayed and discussed by Michael F. Kidzus, vice-president of the club. Donald Parser, international gem dealer, spoke in February on Gem Stones of the World and their Availability, displaying samples.

Winners for March displays were Mrs. C. Anthes and Mrs. C. Freeman, who tied for the "most appropriate for St. Patrick's Day;" Mrs. Jean Tamburri won for most artistic arrangement and William C. Clinton for greatest variety of green stones. Contest for April was for arrangements appropriate for Easter.

North Jersey Mineralogical Society had Michael McCabe of the New Jersey Bell Telephone Company speak on The Growth of Synthetic Crystals, in February; displays including synthetic minerals, crystals and synthetic cut stones. In March Brian Mason of the American Museum of Natural History of New York was scheduled to speak on Zeolites of the New Jersey Traprocks; the display to be any nice specimens of New Jersey zeolites. This club is building a library of books on geology and minerals.

The Geological Section—Buffalo Society of Natural Sciences had their vice-president Thaddeus Czerniejewski talk on his collecting experiences last summer on A Trip to Nova Scotia, illustrated with slides taken

on the trip. The March meeting night was devoted to the installation of displays for the Geology Exhibit of Specimens of Geological Section Members in the Buffalo Museum of Sciences, open to the public from March 8 to April 3. A Spring Trade and Sale was scheduled for April for members to have the opportunity of eliminating surplus material and adding new specimens to their collections. Elmer Lewis was appointed chairman of a committee to compile a list of mineral collecting localities within a few hundred miles of Buffalo, data to include how to find it, from whom permission must be obtained to collect, and what materials are available.

The Fulton County Mineral Club, of New York State, at a recent meeting had a display of staurolite crystals from Prairie County, Virginia's Fairy Cross Park near Roanoke by Louis Valachovic, with Ara Dildilian distributing staurolite crystals among the members. At another meeting Rodger Schultz gave a report on a trip to the Corning Glass Works, where members viewed the complete process of glassmaking and the collection of glass in the museum. After this the group visited the home of Charlie Bennett at Horseheads to see his collection of worldwide mineral specimens and select specimens from his supply for themselves. Another meeting was held at the Knox Junior High School in Johnstown, with Russell Pollard, science instructor, as host; at another there was a Bragging Night on Salisbury and Middleville specimens, with Bill Chaknis displaying beautiful specimens of Herkimer "diamonds" and smoky quartz. Another Bragging Night was held at Chester on Vermont specimens; another featured specimens from Ellenville, Kerhonkson and Warwasing, with Jo Van Tassel displaying fluorescent minerals of the west. They met in the Gloversville Chamber of Commerce in February, with Louie Valachovic showing his unusual collection and Adrian Labuz displaying unique specimens of dogtooth calcite formations collected at Clinton, N.Y. Phil. and Philip Scarowski displayed unusual western minerals from California. Mineral specimens from Tahawus and Chittenango Falls were also discussed. A Bragging Nite on Schoharie, Pittsfield and Tahawus specimens was held in March.

The New York Mineralogical Club, Inc., of New York City, had Dr. Gunnar Kullerud of the Geophysical Laboratory of Washington, D.C., speak in February on the Synthesis of Sulphide Ore Minerals, and report an excellent talk on lab techniques and the specialized equipment used to produce the heat, pressure and temperature controls; and the gold "bombs" used to hold the ingredients. Excellent slides both in black and white and color, illustrated the equipment and showed the synthesized crystals of the sulphides of iron, zinc, antimony, copper and a few others. Many of these crystals rivaled those produced by nature.

One of the longest question and answer periods ever witnessed was held at the end of the lecture. One of the interesting facts turned up in the post talk discussion was that digenite turns out to be a common mineral at Butte, Montana, is found in many localities all over the world and has been often thought to be blue chalcocite. It is a true species and surprisingly stable. Synthetic crystals of digenite were shown via the color slides.

Einar Whalen reported good progress on the publication undertaken by his committee namely: List of 15 minerals named after members of the New York Mineralogical Club. He stated that cuts are being made and if all went well, the bulletin would be in print by the next meeting.

William Pfeifer displayed a slab, sliced from a large piece of crystalline limestone, collected at the South Pole, Antarctica. It looked like a slab of very coarse white marble.

A motion was passed unanimously that the club enter a mineralogical exhibit in the convention show being held in Boston on July 16, 17 and 18.

The Queens Mineral Society, of New York, had a field trip in February to the American Museum of Natural History, after lunching there in the cafeteria. Al Green, past president of the club, conducted the tour describing the minerals and answering questions. While this was to be a field trip of "no collecting," members collected some agate from South Dakota via Herbert Obodda. Vic Pribil was interested in the cut gems and gave an interesting demonstration of when a light was flashed on a faceted topaz, the table facet disappeared and the stone appeared to have a well in the center. Dave and Mrs. Hammer were interested in the New York Minerals; Hazel Robertson in the zeolites, while her daughter went for tungsten. Frank Touhey spent some time sneaking up to take pictures of the group looking into the cases. So did Dave Hammer.

The Rockland County Mineral and Gem Society, of New York, started a members

participation program of talks in February. George Weeks originated this plan some years back, and they report some surprises when some of their members gave a program equalling professionals. This is scheduled alphabetically, and the first speakers were Robert Baker, on barite; Fred Blanpied on Herkimer "diamonds" and Stephen Boross on prehnite. Mrs. Marguerite Collyer, Edward Howard, Jr. and Ross Horowitz were to speak in March, subject matter not disclosed at this time.

A field trip to Sayresville, New Jersey, for pyrite and marcasite balls was planned for April.

The newly formed lapidary division is reported going great guns, and expect to have something to show at Boston.

The Tri-State Rockhounders, of Brasstown, N. C., met in their own clubhouse in January, and are proud of the fact that they now own the building, which contains ample space for meetings and permanent displays, with an adjoining room equipped with electric stove, etc. for serving food. Our congratulations to this society.

The Mineralogical Society of Pennsylvania met at the Wagner Free Institute of Science in Philadelphia in February to hear C. Fred Muth talk on Crown Jewels, with the museum open for visiting before and after the meeting. The sixth annual kodachrome show was held in Claymont, Delaware, where Paul Seel showed a movie of Mexico taken during a vacation trip; Mr. Davidson, F. Lord, Florence Evans along with Paul Seel showed slides of field trips and mineral collecting activities. Mr. Davidson also showed slides of a trip to Mexico. After the slide show and movie, members went to the home of the Davidsons to enjoy refreshments and see Mrs. Davidson's workshop and equipment for jewelry making.

The March meeting was held at the Reading Museum in West Reading, where they viewed a motion picture of one of the minerals, and visited the inner sanctuary of the museum where specimens and displays are prepared for exhibit; then a swap and sell session for the rest of the afternoon.

A lapidary meeting was scheduled for March 15 in Hellertown, at the home of "Pop" Gillman, after which they were to visit the Lost Cave Museum.

Date of the anniversary dinner was changed to April 18 at the Spring Mountain House, in Schenksville. Along with speeches, music, entertainment, two films were on the program, one The Petrified River and the other In the Beginning.

Western South Carolina Gem and Mineral Society, of Greenville, had a program in February on Introduction of Identification of Rocks and Minerals headed by Mr. Byrne and a panel, showing tests and experiments. In March, Dr. Paul L. Fisher, Head of the Geology Dept. at Furman University, spoke on Geological Knowledge of the Age of Land Forms. A field trip was set for Scuttles Camp, Lake Secession, Abbeville County to hunt mica, zircon, amethyst, beryl, topaz and smoky quartz.

The Hammerhead Rock Club, of Etowah, write they are proud to be the first club in Tennessee to become a member of the Eastern Federation, and hope to have a representative at the Boston meeting.

The Virginia Pen of the *Gem and Mineral Society of the Virginia Peninsula* reports a film for their February meeting entitled The Story of Copper, furnished by the Bureau of Mines, at Pittsburgh. This club held their annual banquet in Hampton in January, with the Pebble Pups, the junior group they sponsor, holding their banquet simultaneoulsy in an adjoining room, with about 60 members attending each. A talk on fossils was scheduled for March, and for April a three minute talk by each member on their favorite gem, mineral specimen or fossil.

(If there is no news about your club, it might be that you didn't send it to your Current Events Editor, Mrs. Elsie Kane White, 3418 Flannery Lane, Baltimore 7, Md.)

EASTERN FEDERATION HISTORY

By FLORENCE M. HIGHT

(*Continued from March-April*, 1959, *p.* 144)

The Third Annual Convention and Gem and Mineral Show was held in the Alexander Hamilton Hotel, Paterson, N. J., on October 8-9-10, 1953. The main ballroom was equipped with special lighting for the Dealers and their displays, and two large adjoining rooms took care of individual and society exhibits and lecture room needs.

The National Museum of Washington loaned an exhibit of outstanding mineral specimens, all of them large, very fine and practically impossible to duplicate. They were greatly admired and as one visitor said, "they serve as something to aim for." The specimens were Russian malachite, Brazilian rutilated quartz, Argentine rhodochrosite, Arizona azurite-malachite, Brazilian white topaz, New Mexico smithsonite, the new Virginia prehnite with apophyllite, and half of an amethyst geode from Brazil. There was also an interesting mineral inlay map of the United States.

A non-competitive gem display was shown by the very old firm of Wiss Jewelers of Newark, N. J. It featured a collection of colored diamonds in various tints of yellow, pink, blue and lilac.

There was a tray of scenic agates cut in flat cabochons; one of engraved crests on citrine, amethyst and smoky quartz; and one of intaglios cut in carnelian and sard. The whole display just short of priceless.

At noon on October 8th, the Mayor of Paterson's representative extended greetings and using a mineral pick with professional accuracy cut the ribbon that stretched across the entrance to the ballroom in which rough and cut gems, agates, fluorescents and just about "everything for the rockhound" were displayed by mineral dealers, and the convention was officially in progress.

Until the closing hour on Saturday night eager and interested visitors thronged the display rooms, admiring and buying minerals, greeting old friends and making new ones. Noted among the visitors enjoying the exhibits was Paterson's Representative to Congress, Gordon Canfield. Many children were present Friday evening and Saturday, and they too were much interested in the minerals.

Many visitors at the convention accepted the invitation of the Paterson Museum to see its mineral collection. For more than a quarter century Paterson Museum has specialized in minerals, particularly those of New Jersey. Its collections of Paterson zeolites and associated minerals, and of minerals of the Franklin zinc district are unsurpassed. Its fluorescent display is magnificent.

The Convention program provided four lectures; two on gems and two on mineral collecting.

Robert Crowningshield, director of the gem trade laboratory of the Gemological Institute of America, and Jerome Wiss, Newark jeweler and a member of the Gemological Institute's Board of Directors, spoke from the professional viewpoint, rather than the amateur's, in discussing the identification of gem stones.

Mr. Crowningshield said no one can be sure of what a gem is just by looking at it. To prove his thesis he handed his audience a tray of 24 different stones in shades of yellow and green, almost any one of which might be taken for something that it was not. He pointed out the impossibility of using ordinary mineralogical tests such as blowpipe and scratching, and with a mounted stone, the impossibility of the specific gravity test.

Among the pitfalls, he mentioned the confusion formerly existing in gem names where a stone was often marketed for something other than what it was; and in more modern times, the changes that are sometimes made in stones by heating and by exposure to gamma radiation.

On the positive side, he said the refractive index reading is usually a very good test, —also microscopic examination. He showed some of the jeweler's laboratory instruments including the polariscope, the dichroscope, immersion liquids and the sodium vapor lamp, and explained how they are used and what information they give on identification. The microscope and the ultra violet lamp are used to tell real from synthetic stones, he said, and added that the X-ray test must be used on pearls. Pearls from fresh and salt water differ and so do real ones and cultured ones. He told Society members that it is almost impossible to discover the type of irritant substance that results in the birth of a pearl in an oyster. He characterized as fallacy the common belief that a speck of sand worked its way into the oyster.

One of the most difficult gems to identify, according to the speaker, is the synthetic emerald. Found eventually, that the "Chatham" emeralds turned red under ultra violet light, while the natural emeralds do not.

(To be continued)

R&M has become an INSTITUTION!

Editor R&M:

Along with my renewal come words of praise for your continued outstanding success in putting out such a swell magazine. R&M has become an INSTITUTION.

William Guild, Director
The Science Center
P. O. Box 118
St. Petersburg, Fla.

THE AMATEUR LAPIDARY

Conducted by Captain George W. Owens

Hq. Sq. 384th Bombardment Wing, Little Rock Air Force Base, Jacksonville, Arkansas

Amateur and professional lapidaries are cordially invited to submit contributions and so make this department of interest to all

Topaz

True topaz is a beautiful stone that lends its beauty to both silver and gold work. It is sufficiently hard to be used in any type jewelry and some of the world's famous gems are of this material.

Topaz, unlike some of our other gems, is found world-wide. Very large crystals have been found that were of both excellent color and grade. Brazil produces most of the sherry, red, rose, pink, yellow and greenish topaz. In fact, Brazil is the leading producer of this fascinating and beautiful gem. California, Colorado, Maine, and Utah in the U.S. have all produced good to museum types of crystals. The Smithsonian Institute in Washington, D.C. has a superb blue from Colorado on display. Ceylon produces the very best of the white topaz, sometimes calles "Slaves' Diamonds". A really excellent faceted white is a "must" for any collector. It does resemble the diamond and does make a fine addition to the collection. These "Slaves' Diamonds" are not expensive but are certainly worth the time and effort it takes to facet them. We recently faceted several hundred carats, in sizes up to twenty carats, of this fine material. A tray of these is a joy to behold! Ceylon also produces a light blue and a fair green topaz.

Perhaps the world's finest blue comes from Madagascar. Madagascar—land of mystery—at least, mystery in precious gems, where we have been trying for several years to get a contact, without success.

Topaz also has been recovered in Scotland, Ireland, Africa, Burma, Mexico, Japan, Australia and just about every place other gems are found, including the tin mines in Cornwall, England and Saxony in Germany. At one time Russia produced some excellent blues, but this source is out of reach of us amateurs. Someone should write the Russian Embassy in Washington and request some help in obtaining a few specimens. (Wonder what action they would take?)

Topaz occurs in situs as well as stream beds with other gem gravels. It is associated with tin ores, tungsten, beryl, apatite, fluorite, tourmaline and quartz. The Ceylon recovery is as rolled pebbles in placer deposits while in California, Brazil, and England it is nearly always in situs. Some of our finest mineral specimens of this lovely gem are in association with the other minerals. One of these, exceedingly beautiful, is a specimen crystal of approximately three inches in length affixed to the side of a mammoth smoky quartz crystal. A small lamp placed behind the quartz accented the display of this specimen. The light revealed every line and "flaw" of the specimen in such a manner as to make them add to the display, rather than detract.

In cutting topaz the artist lapidary can use the full extent of his talents as this gem responds to practically every cut from cabochon to the ultra fancy in faceted styles. Additional facets enhance it. Brilliant, mixed, step, and modern cuts all are successful. We have cut the "Slaves' Diamond" with as many as twelve mains. The result was extremely lively and gorgeous. We recently traded one of these fine gems to Mr. Max Jester of Magnolia, Arkansas. Max is one of our better silversmiths. His creative ability in both silver and gold is outstanding and we are waiting to see how Max will mount this fiery gem. We know it will be an outstanding success. If you are planning either some silver or gold work in the near

future, you certainly should give some consideration to using one or more of these fine gems as a means of enhancing your art.

Topaz belongs to the orthorhombic system, it is prismatic, and is often found with an interesting pyramidal termination.

There are many varieties of topaz in the regular jewelry trade and, we must confess, some of these kind gentlemen have a tendency to sell both smoky and citrine quartz under the name of Topaz. We amateurs naturally know better but you would be surprised at the number of fine citrines (a good gem in its own right), that grace milady's finger under the guise of being a Topaz.

In color range, topaz runs from perfectly transparent white (Slaves' Diamonds) to red, which is extremely rare. So we find the following:

Colorless—"Slaves' Diamond"
Pale yellowish-green—"Saxon topaz"
Orangy-yellow to golden yellow—"Brazilian topaz"
Brown-yellow to sherry—Sherry topaz (also dark orange to orange/red)
Light blue—"Brazilian sapphire"
A good blue—Topaz
Light green—"Brazilian aquamarine"
Light violet—A rare color resembling a pale amethyst—violet topaz.
Light red to purplish-red—Generally a heat-treated stone as this color is very rare in natural topaz—No special name.
Red topaz—(Extremely rare)—Deserves a better name than *"Brazilian Ruby"* —Which as all others listed in "Brazilian Ruby", is not a correct name.

While topaz is not an expensive stone, it is a most beautiful one. It has merit and beauty, although a bit soft for hard usage in men's rings, it is a very desirable gem. Its fine pastel colors blend with nearly any type of dress and lends distinction to evening gowns and capes. Fine, clean gems are not common. Topaz is subject to flaws, feathers, and inclusions as are the other gems, but topaz overcomes this by its fine and unusual body appearance. Blue stones are especially lovely; however, for sheer beauty, the perfectly white, perfectly cut topaz is hard to beat by any gem.

Topaz is a stone which takes a high and lively polish, is 8 in hardness, but is poor in toughness. Its cleavage is nearly perfect parallel to the crystal base, while the fracture runs from shell-like to plain uneven. SG is usually cited at 3.53, but the colorless goes as high as 3.56. It is a double refraction gem, 1.61 to 1.63 range. You will note that the specific gravity of 3.53 is nearly the same as that of diamond. Topaz is most often confused with tourmaline, especially in the lighter color tones of that material. A good SG test will separate topaz from tourmaline.

All colors of topaz are extensively used in jewelry and each is beautiful in its own right. Of all the colors, probably true white, violet and red are lacking in most of our collections. (True white is used to cite the difference between the many extremely pale whitish-greens and blues seen in so many collections, including museums, and labeled "white". True colorless topaz will have no tone color and rivals fine diamonds in appearance. Natural violet and red topaz are truly museum pieces and the collector who is fortunate enough to have such a stone in his collection is indeed lucky.

Topaz is not a difficult stone with which to work. The angles of 40° for the Pav mains and 40° for the Crown mains gives a very good appearing stone. The mains may be split if desired, either vertically or horizontally working equally well, although the vertical split is preferred by us. In cutting, the finer the final cut, the greater ease of polishing. A good polish is obtained using cerium on a tin lap. Moderate lap speeds seem to cause faster polishing. Tables of very large stones are hard to polish using cerium but a fine polish on a stone of approximately 20 carats was obtained using diamond bort in the "6400" grade. No special techniques other than the change of polish powder was used in cutting this stone. All facets are well proportioned and have an ex-

cellent polish. If you can facet quartz you can facet topaz. If you have never faceted a nice topaz, why not write your favorite dealer for a bit of inexpensive rough and try your hand at it. Or, perhaps Mr. George Bruce, 128 N. Parkwood Dr., Forest Park, Ga., will be able to supply you with one of the rare true whites, violets, or reds for your collection if you do no faceting. George is an avid and well informed collector as well as conducting one of our better gem establishments—the International Import Company of the same address. Write him a letter or post card tonight—you will be more than pleased with his friendly and courteous reply. Remember to mention the Amateur Lapidary or R&M when writing. It will be appreciated and certainly will be considered a nice gesture on your part.

In the event Mr. Bruce is not able to supply you, a card to us will get you further information as to where you may locate a fine topaz, which is a must for any collection.

To the kind lady in Maine who did not send her return address (and to anyone else interested): Yes, we would be interested in seeing and trading a fine sapphire for blue apatite or Maine tourmaline crystals.

And for the person in American Lake, Washington: Your large package of rough arrived, but we cannot locate a return address. Please write us a card.

While we are on this subject, may we request that when you write, that you *print* your return address on both the envelope and letter? We have received some very interesting letters, questions, and offers which cannot be answered because there is no return address. It will be appreciated if you do this kindness for us.

Note: We have several beautiful true white topaz of the "Slave's Diamonds" type, so if you have never seen a true white topaz, we will be happy to send you one on a short loan for study purposes.

Trip to Colombia

We are planning to fly in July to the Republic of Colombia, South America. Bogota will be our first stop. We would be most grateful if you could give us the address or addresses of some folks interested in minerals there. It surely would be most helpful to us.

Mrs. Emma J. Bareiss
103 The Boulevard
Mountain Lakes, N.J.

Sorry to say we have not even one subscriber in Colombia. But do as we would do when you get there. Call on the U.S. Consul and the American Embassy, tell them of your interest in minerals, and they may refer you to one or more of the many American mining engineers or geologists who must be in or near Bogota. Then there are museums, universities, and other institutions who may have minerals on display. A few years ago when in Mexico City, we called at the university and saw a wonderful display of Mexican minerals and—we were presented with a number of specimens.

Perhaps one of our readers may have some suggestions.

R&MA members in Massachusetts

I was wondering if there would be some members of the Rocks and Minerals Association in the eastern part of Massachusetts that you could tell me about or give me their address? I would like to get in touch with them so we might share our interest.

Donald Davenport
Box 231, Concord Road
So. Sudbury, Mass.

Yes there are many and we hope some of them will contact you.

R&MA established in 1928

I noticed the emblem of the Rocks and Minerals Association on the front page of R&M. I couldn't make out whether it was established in 1928 or 1958. Just curious. If my Latin doesn't fail me, doesn't the inscription *Granum Aurum* mean "a grain of gold?"

Just Curious

The Rocks and Minerals Association was established in 1928. The Latin names *Granum* (granite) and *Aurum* (gold) were selected in 1933 by vote for the official rock and mineral of the Association.

ROCKS AND MINERALS ASSOCIATION
(International)

NOTES & NEWS

Don Presher, Pres. Box 29, Peekskill, N. Y.

I am pleased to report that many members are availing themselves of our new identification program. We have been receiving packages from many states and Canada. It was hoped that we could help novices in this way and your participation has proven this to be so. Some of the more advanced collectors also asked for help and we are glad to be of assistance to them if possible. However I must point out that we do not have the equipment to make a thorough analysis and therefore cannot guarantee identification in every case. I must ask for your patience while waiting for our reply as we keep pretty busy.

We are very pleased to note that the Collectors Corner is growing and a few words on this department seems to be in order. As the heading of this department states, it is with the hope that through correspondence, exchange of ideas and specimens, new friendships may be formed. In the exchange of specimens, it is hoped that the exchange will result in mutual benefit and pleasure to both parties, however in some cases we may feel that we may be on the wrong end of the bargain and if this thought arises I would like to point out that anyone of us that sends mineral specimens to others does so with the hope that it will be of help to them and will please them. Some of us are near locations that can supply beautiful specimens and others are in areas where good specimens are scarce and hard to come by. To be on the giving end of pleasure is a good feeling that should not be overlooked, add it to the credit side of your satisfaction account. A word of caution about wrapping your exchange material, fragile specimens should be protected as much as possible. Nothing is more disappointing than to receive what was once a beautiful specimen, in broken pieces. Also be sure to label everything you send and give all the possible information that you may have on each offering.

What are your wishes in regards to emblems? Emblems for the car can now be purchased from L. Duersmith (see ad this issue) and I have contacted several manufacturers of shoulder or pocket patches and find that if enough members are interested, they can be supplied for 75¢ each. They would measure 3½" x 3" and would be on a white twill background embroidered with washable thread in the official colors of the Association which are gray and gold. This would be an attractive addition to the old rock hunting jacket and shirt and would certainly be of great help in building and adding to the recognition and respect for our association. What I am asking you to do is to send me a postcard if interested and let me know if you would want one or more of these emblems if they were available. If there is enough interest in this I will advance the money and have them made up. These emblems would surely serve as introductions to many of our members when in the field and certainly be a badge of distinction when worn by one of our pebble pups. IMPORTANT DO NOT SEND ANY MONEY. If your response justifies going ahead with this I will notify you or send the emblems to you.

I have received several requests for names and addresses in various areas. The purpose of these requests was to contact fellow members in the locality with the hope of getting together as a club or going on field trips as a group.

I cannot release names of members without their permission and therefore cannot help in this way but if anyone wishes I could mention their name and location in this column and ask members in the area to contact them if interested.

Keep the mail coming in and send those specimens in, if puzzled. You may puzzle us too but we will do our best. Incidentally, some of the larger specimens sent for identification have been added to my collection. I thank you. Best of luck and good hunting.

Please send a self-addressed stamped envelope when applying for membership card.

Mail to:
DON PRESHER, Pres., R&MA
Box 29, Peekskill, N.Y.

MINERALS TO CHEER AN AILING BOY!

Editor R&M:

We are the parents of an ailing boy who has been ordered to curtail all his previous lively and healthy activities for those of a more sedate way of life. This sudden shut-in enforcement resulted because of a run-down and anemic condition.

It breaks his little heart to see and hear the lively and happy play and merriment of healthier and more fortunate children just outside our window. Because he was once so active and eager, so alive to every challenge and adventure, he finds it extremely difficult to adjust himself to this sudden change. It saddens us no end to watch him, day after day, walking about aimlessly with so little to do. It drives us to tears at times to see how bravely and uncomplaining he carries on when we feel down deep inside that his little heart is hurt and sad over the loneliness and despair that tugs at his weak heart.

Out of the wealth of talent and wisdom shown for such a young lad, our little patient and scholar has shown a remarkable interest in subjects relating to NATURE. His thirst and hunger for knowledge engulfing the confines of this world is really amazing, especially when one considers the very limited conditions and handicapped circumstances under which he has to labor.

I am unemployed for quite some time, with only seasonal work at best to look forward to, plus a very moderate wage to go along, we find it extremely difficult if not impossible to help our youngster as we'd like. That is why, Mr. Editor, we are so concerned over our little man's plight and future that we are writing you, in sincere hope and prayer, that, because of your position and reach, your enviable talent, you may take it in your heart to honor us with a small selection for our boy, to brighten his little world of doom and loneliness. We feel certain, sir, that even the smallest consideration, the kindest response on your part, would bring so much sunshine and joy into his little heart. Please, sir, if at all possible try to help us, help him—and God bless you!

Our youngster's collection of minerals is so small that it lacks color and variety, and, truth to tell, all those he has are common rocks found in nearby parks and hills, and we know his eyes would sparkle, he would feel so happy to receive a surprise of minerals.

Before closing this letter, Mr. Editor, will you please feel free to include any portion of it in any future issue of your tremendous magazine. We would be forever grateful to any and all who might wish to bring a little happiness and sunshine into an ailing youngster's life.

Our little lad's name is Peter Wackell, Jr., and he is 10 years old.

Mr. & Mrs. Peter Wackell, Sr.
15 Home St.
Worcester, Mass.

Editor's Note: This is the most touching letter we have ever received and our heart bleeds for the boy, and for his parents. Every day we read or hear of parents, neglecting their children, or abandoning them and God help us, even doing away with them. Of course we will help young Peter—he will receive, free, future copies of R&M, an assortment of minerals has been sent him, and we hope and pray many of our readers will do their bit sending him a few minerals.

WHITE CANYON, UTAH

By PATRICK FANCHER, Box 63, Ouray, Colo.

Housing shortage? There are houses here which have stood unoccupied for 700 years. Stone houses built by the Cliff dweller Indians from about the year one to the great drought of 1276-1299. Later Indians had a superstitious fear of the Old Ones and left their belongings severely alone. Centuries after the Moki left, white men found the homes exactly as they had been, with pots of food still sitting on the long-cold ashes.

The beauty of the pottery designs has long been acclaimed by art connoisseurs. To me, the predominantly straight lines seem to reflect the landscape, which is largely perpendicular. Sheer-walled canyons, great buttes, fragile-seeming monoliths, with seldom an acre of level ground. No wonder they were called Cliff dwellers.

In the language of the geologist, the high cliffs are the Wingate formation several hundred feet thick, underlain by a few hundred feet of Chinle shale, under which is the uranium bearing Shinarump conglomerate lying on the impervious Moenkopi. Many other formations are exposed here, but these four have significance for the uranium miner.

The easily eroded Chinle shale often leaves residual concentrations of jasper, jasp-agate thundereggs, opal, satin spar, hematite nodules, septaria, clay concretions, carbonized wood, and in great profusion, silicified wood. The wood sometime is agatized in beautiful colors, and is almost invariably found around the old Moki camps. In the hollow heart of one silica tree I found some smoky quartz crystals, pyramidal terminations of lustrous black.

The rocks are of Jurrasic-Triassic age, and during the Cretaceous age they were covered with sea water and no circulation was possible. Then in the Larimide revolution the rocks were tilted and faulted, and circulation of water became possible. Geologists do not agree on the exact manner of deposition of the uranium ores. Replacement of organic material is obvious and undeniable, and lateral migration is also prevalent. The usual pattern is a carbonized tree containing U minerals and copper and iron sulphides. Around the tree is a halo of rich ore, doubtless caused by gases escaping from the chemical reaction in the tree itself.

The richest ore occurs on the flanks of the channel. In the center of the channel the copper and iron have been oxidized, and the U minerals have dissolved and washed away, or migrated. Since the miner is guided by his Geiger counter, the resultant imbalance of radium-radon-uranium is confusing and costly. The radium-radon gives a high count, causing the poor miner to think he has hi-grade ore. But chemical analysis shows that the uranium pay-dirt has leached out and washed away.

In the White Canyon district almost all the yellow oxide minerals have been found. Present surface conditions govern that, however, and the Radium King mine where I am employed has very little oxidation. The mine is at the head of a steep canyon, and is deep beneath a protective covering, both conditions which inhibit oxidation. The copper sulphides, chalcopyrite, bornite, chalcocite, and covellite are brilliant and beautiful on fresh fracture but dull quickly on exposure to air. The U minerals in these sulphides are seldom visible to the unaided eye, but they will sometime "peg" a Geiger counter. I have found beautiful specimens of chalcocite, covellite, chalcopyrite, pyrite, and bornite all with a good "count" of uranium.

Colorful combinations of the sulphides, all showing the tree structure are rather common. And, tho much less common, I have found masses of pure pitchblende. Analysis of this mineral shows that it contains no element in excess of one per cent except uranium, a fact which seems to indicate a very high U content. The

pitchblende is pitchy black and very heavy. It, and the related mineral coffinite, are the highest grade of the U minerals. From pitchblende come the first radium, and the first helium on earth (helium was first discovered on the sun, as its name implies).

Roads are being built into the Natural Bridges National Monument, the Glen Canyon dam on the Colorado River will draw more roads, the uranium mine roads are being improved, and this area will someday soon be a collecting locality for the rockhound. Now, however, roads are poor, and there are no luxury resorts. In fact, there are no resorts at all. A tourist should take water and food and camping facilities with him.

A visit to Mesa Verde National Monument in southwest Colorado with its cliff dwellings and museum, will acquaint you with the Moki Indians. Artifacts found on the surface belong to the finder, but digging is forbidden. Also uranium deposits, if not already staked, belong to the finder. But bring sufficient money for the return trip home, just in case you don't find any fabulous deposits. And don't look for gold in the Moki ruins—they had no metal of any kind. And cutters, tho you can't take any of it home with you, this is the Land of the Turquoise Sky.

(Ed. note—White Canyon is in southeastern Utah, in San Juan County, north of the town of Hite).

PUBLICATIONS RECENTLY RECEIVED

Fritzen—The Rock-Hunter's Field Manual.

By D.K. Fritzen, 207 pp., 7 pp. of crystal drawings. Published by Harper & Brothers, 49 E. 33rd St., New York 16, N.Y.—price $3.50.

With the boom in rock-hunting and prospecting as a national sport, this guide to identification is just what the amateur needs. It is based on a simplified, scientific system tested in use by the author over many years of field experience.

The book is developed around two main sections. The first of these is a color key, under which minerals are identified initially according to color, in alphabetical order and with duplicate entries when they occur in two or more colors. Then each entry is further characterized according to its physical properties of luster, streak, hardness, weight, and cleavage or fracture. By measuring these properties in a particular specimen and comparing them with the minerals in its color category, the prospector can proceed quickly toward identification of his find.

The other main section of the book is designed to give the amateur more general knowledge of minerals. Here are described the various uses of each subject for jewelry or industrial purposes, its crystal formation, and the kind of terrain or deposits in which it is likely to occur. Thus the rock-hunter intent on finding a specific mineral can use this section to guide him to a likely location, then apply the tests under the color key for more exact identification.

For the beginner the author provides brief instructions on the methods of determining such properties as streak, hardness, and cleavage, and the usual procedures for gathering and labeling a collection.

The book covers 126 common and rare minerals. Its combination of simplicity and accuracy make it a handy reference for the student of mineralogy as well as for the amateurs, young and old, who go prospecting for the fun of it.

Zim—Diamonds.

By Herbert S. Zim (illustrated by Gustav Schrotter), 64 pp., Published by William Morrow and Company, Inc., 425 Fourth Ave., New York 16, N.Y.—price $2.50.

This compact, profusely illustrated book presents many important facts about the best and most prized of all the gems in the world, and some of their extraordinary history.

Diamonds consist solely of carbon, so Dr.

Zim begins by explaining what carbon is and how heat and pressure can transform it into diamonds. He then names some of the most famous diamonds in the world and the places they came from. This leads us from India, Brazil, and Africa to Murfreesboro, Arkansas, in our own United States. The next step is from gem to industrial diamonds—a tremendous success story. The hardness of the diamond is what makes it important in industry. It is used, for example, in phonograph pickups; in many kinds of drills, including dentists; and in all kinds of electrical equipment, including the filaments of electric lights. The brilliance of the gem diamond is due to refraction (bending of light), which is achieved by cutting the diamond, a highly specialized craft.

The final section deals with the attempts to make synthetic diamonds and some actual recent successes.

CALIFORNIA PUBLICATIONS

Plants as a guide to mineralization.

By Donald Carlisle and George B. Cleveland, 31 pp., 10 illus., price 50c.

Economic geology of the Darwin Quadrangle, Inyo County.

By Wayne E. Hall and E.M. Mackevett, 73 pp., 9 pls., 25 figs., 9 photos. Price $2.50.

Available Publications, 27 pps.

The above 3 publications have been published by the California Division of Mines, Ferry Building, San Francisco 11, Calif.

Wayne's—Let's look at some rocks.

By William J. Wayne (illustrated by Robert E. Judah), 36 pps. Published by the Geological Survey, Indiana Department of Conservation, Bloomington, Ind. Price 35c.

An interesting, illustrated publication on the rocks and minerals of Indiana.

Greenberg-Bundy-McGregor—Guide to some minerals and rocks in Indiana.

By Seymour S. Greenberg, Wayne M. Bundy, and Duncan J. McGregor, 60 pp., 6 figs. Price 25c.

Published by the Geological Survey, Department of Conservation, Bloomington, Ind.

Franklin Mineral Digest.

The Franklin Mineral Digest (31 pp.) is the official publication of the Franklin Mineralogical Association. It is published once a year at Middleburgh, N.Y. Copies are available through membership of $2 a year in the Association.

Gerald J. Navratil, Sec-Treas. and Editor, Box 70, RFD 2, Middleburgh, N.Y.

New York State Vacationlands.

Beautifully illustrated (all in color), 192 pp., covering vacation areas in every county of New York State.

Published by the Department of Commerce, 112 State St., Albany, N.Y.

Rockhound Buyers Guide.

Annual encyclopedia for the rock hobbyist, 252 pp., of intensely interesting items, ads, etc. Published by the Lapidary Journal (Lelande Quick, Pres.), P.O. Box 518, Del Mar, Calif.—Price $1.

Dealers Catalogs

Everett Lapidary Shop, 2941 N. 65th, Lincoln 5, Nebr., have issued a new 16 page price list whose center fold is a map showing some of Nebraska's gem and fossil fields. A copy of this price list will be sent to anyone who sends in a stamp.

Minerals Unlimited, 1724 University Ave., Berkeley 3, Calif., have issued an 8 page price list—"Fine Mineral List" is its title. If you are interested in fine minerals, and who isn't, send for a copy of this new list today.

Don Ward Minerals, 304 Catron, Santa Fe, New Mex., have issued a new mineral price list covering choice minerals in their stock.

John A. Albanese, P.O. Box 221, Union, N.J., has also issued an 8 page price list titled "Latest Price List of Fine Minerals Specimens."

The Micro-Mounter

(*Continued from page* 227)

when we tried to dredge up sentences that spelled the same forward or backward. Like Napoleon's lament: "Able was I e're I saw Elba." Or the classic remark when the first occupant of the Garden of Eden introduced himself to the second: "Madam, I'm Adam."

WITH OUR ADVERTISERS

Conducted by James N. Bourne
c/o Rocks and Minerals. Box 29
Peekskill, N. Y.

Advertisers are cordially invited to submit News Items to this Department

From Alfred Stevenson, of Birch Villa, on Lake Christopher, Bryant Pond, Maine, we are in receipt of the following item that should be of interest to those visiting in Maine this year.

"With the Eastern Federation show opening in Boston this summer we hope to see quite a few people coming up to Maine after the show. We can offer them restful and satisfying accomodations at Birch Villa. Most mineral collecting locations are within a short drive from here. A lapidary shop has been set up for the guests' convenience. All this, combined with the congenial fellowship of the other collector guests, should lead to a happy stay of collecting, swapping and exchanging experiences, plus good food. How can you beat this combination.

"We will be pleased to answer any inquiries as to rates, location, etc. and note our ad in R&M in their display section this issue."

Although they need no introduction, we would like to further acquaint our readers with the Painton's, of Fairview, Okla., who regularly advertise in R&M. Painton's Rockery, Fairview, Oklahoma, is a full time rock shop. It is owned and operated by Ivan and Mildred Painton and their two daughters, Elaine 16 and Janice 12. The Paintons have been rockhounds, collecting and cutting for years. They are well-known over the south-west for their work in Lapidary, both faceting and cabochon, of which they have a very fine collection. A recent note from them reads:

"The Rock Shop has been in operation since 1952 serving customers from coast to coast. The Painton's handle top quality Montana and Mexican agates, colorful Oklahoma jasper, supplies and equipment, faceting material and hundreds of other rocks and mineral specimens from all over the world." Note: Four very nice dolomite pyramids were sent to us by Mr. Painton. The dolomite pyramids were collected in Major County, Okla., and one of these specimens is very unusual and rare with a perfect gray top or point. We are grateful for this very nice addition to our collection.

We are pleased to make mention of Winston Gold of Globe Minerals, Box 504, Borough Hall Station, Jamaica 24, N. Y., who feature fine specimens for collectors, schools, museums and laboratories. A word from Mr. Gold:

"I've been collecting and studying minerals for 20 years. Currently I belong to the New York Mineralogical Club and the Mineralogical Society of America. My customers will find that I am always anticipating their needs and best interests. I am continuously searching domestic and foreign sources for good specimen materials as well as for items of interest to all folks who like nice accessories in alabaster, onyx, rose quartz, etc. At the present time I have some very nice pink xls from South America, beautiful geode sections of amethyst from Uruguay as well as hundreds of top quality mineral specimens from all over the world.

"We also have some beautiful onyx plaques from Mexico bearing carved fruit figures and exquisite bird book ends in alabaster as well as other very nice alabaster items. I welcome inquiries re: to minerals, prices, and also inquiries from folks anticipating a visit to New York." Note: Readers may contact Mr. Gold of Globe Minerals by visit or through his ads in R&M. He will be very helpful as to your needs.

We are pleased to introduce another of our advertisers to our readers. He is M. Seidman, 144-06 Grand Central Parkway, Jamaica 35, New York. Here goes:

"I have been an avid rockhound, cut stone collector, and amateur lapidary for many years. I am a member of the New York Mineralogical Society and the New York Gem & Lapidary Society for the last six years.

"I have been importing stones directly from Brazil, India, Ceylon, Germany, Japan, and Australia—at the most reasonably low prices and have been passing this saving

to the various collectors. I also have made the finest of gold jewelry, (rings, brooches, earings, tie-tacks, necklaces, etc.), at the very lowest of prices.

"I now am no longer in the Engineering business and can devote my full time to the gem business which originally began as a hobby at the very young age of seven."

Note: We thank you for the above information re: to yourself and entry into the gem business and may your ads in R&M bring you a good response. We have a feeling that many of our readers living in the New York area will pay you a visit by reading a little about yourself in our column and noting your ad in R&M.

Mr. & Mrs. Rohde of Shipley's Mineral House (Gem Village), Bayfield, Colo., have just returned from over two months spent in Old Mexico. Most of the time was spent in collecting specimens for their store. They brought back some superb opal specimens as well as lots of other specimens and carvings.

Geo. C. Dick of the Argyle Mineral Shop, 9207 Argyle Ave., Overland 14, Mo., relates to us the following:

"From the first of the year I have been doing fine. One lady visitor from N. J. and one gentlemen from Maine stopped in to see me (in the dead of winter, mind you)." Note: We hope you have many more visitors with the nicer weather ahead Mr. Dick and that happy associations with mineral minded folk be yours for many more years to come.

From Harry C. Wain, of Mineral Equipment Co., Hampden Road, Somers, Conn., who are specialists in Ultra-Violet Equipment and who are advertising in our pages this issue comes the following interesting bit of information:

"In our ad in R&M this issue we are featuring (2) Ultra-Violet lamps which we hope will soon become very popular with those interested in fluorescent minerals in the need of good fluorescent lamps. We feature the following (2) lamps in different sizes:

"1. Our SW-18 lamp fills this gap. It is extremely powerful yet retails for only $64.50. It may be carried around or used in your display case. 20 inches in length, 3 inches wide, cord attached, and a very attractive finish.

"2. Our SW-5 lamp is a complement to our SW-18 lamp for those who want a small inexpensive hand lamp. Its size is 9 inches long, cord attached, beautiful hammertone finish, and retails for but $24.95. Alzak aluminum reflectors and good size filters are used in the lamps."

Note: We have examined the above two lamps and are very much impressed by both. The SW-18 model is very powerful with instant light. Very, very good and we highly recommend same as to purchase by those interested. The smaller, lighter, SW-5 model, is of course easy to handle, gives good light and is also a very good buy. You should have no difficulty in retailing these lamps Mr. Wain, as they are well worth their price.

James Winder and Roy Soeteber of The Prospectors, Rt. 1, Box 260A, Myrtle Creek, Ore., sent us recently a cabochon of plume agate and a slab of sagenite agate representing material to be had from their display ad this issue. We are pleased to comment that the material is very good and that both Mr. Winder and Mr. Soeteber are very cooperative and will handle orders promptly upon receipt. Thank you gentlemen.

Fluorescent minerals may be purchased reasonably from Steve Stevenson, R.D. 1, Port Jervis, N.Y. Specimens are willemite and calcite from Franklin, N.J., in sizes 2" to 3½", set in stryofoam and have a total weight of about 5 lbs. and priced at $4.75, very nice. Note: Mr. Stevenson would be pleased to hear from our readers and well he should be as he has some nice material to offer.

Peter H. Manuel of Peters Rocks and Minerals, 1316 East Colfax Ave., Denver 18, Colo., sent us a very nice gem quality specimen of green serpentine, size 3 x 4 x 2" thick, for examination. Very nice.

Francis Hoover, regular advertiser of R&M and formerly of Los Angeles, Calif., has recently moved to 11526 Burbank Blvd., North Hollywood, Calif. Mr. Hoover is an importer of some very fine gem material. His price lists are complete and some very good buys may be had by contacting Mr.

Hoover at his new address in North Hollywood. Mr. Hoover is now specializing also in top grade faceting material as you will note from his ads regularly in R&M.

New Junior Sportsman's Axe From Estwing

"Estwing Mfg. Co., Rockford, Ill. announce a new junior size Sportsman's Axe. This new axe is identical to the world famous original leather grip model, only smaller. Forged of one-piece fine tool steel—head can't come off, thin. Easy cutting perfectly tempered blade—mirror finish for greatest eye-appeal. Cushioned leather grip —most comfortable and durable in all climates.

"Beautiful genuine leather embossed sheath free with each axe. Just right for Junior Scouts, Girl Scouts and wherever a lighter carrying belt axe is desired. Large enough for most any cutting job on the trail, camping, scouting, etc. Length 12", width of cut 2¾". List price $5.50."

From Ralph E. Merrill of Minerals Unlimited 1724 University Ave., Berkeley 3, Calif., we make note of the following:

"Your readers may be interested in hearing of our newest move, as it will undoubtedly prove to be responsible for increased efficiency in service to both our mail order and our retail shop clientele. We have just finished moving over 100,000 pounds of stock to a new shipping and receiving department, about a mile away from our retail store at 1724 University Ave. We have moved out of both 1722 and 1728 University Ave., as those two shops were primarily our offices and shipping centers. We are now engaged in renovating our retail shop so that our customers are better able to view our considerable stocks in both the lapidary and the mineral fields.

"In passing, you might extend thanks to those who waited so patiently for their letters and orders in the ten days of confusion surrounding the actual transference of stock!" Note: I'm sure our readers are interested in your recent move, Mr. Merrill, and everyone will profit from the increased service to be extended to all.

We received a very nice mineral catalog from James M. Allen, of Allen's, 322 W. 23rd. St., So. Sioux City, Nebr., listing 740 species and 125 varieties with particular emphasis on minerals listed in volumes 1 and 2 of *Dana's System of Mineralogy, Seventh Edition*. The catalog is arranged alphabetically and before most of the listings symbols are used for easy reference. Mr. Allen says: "The price of the catalog is 10¢ to cover postage and the printing. We also have lists of micromount specimens, fossils, and petrology specimen. See our ads in R&M classified section."

Science Center will exchange!

Editor R&M:

Will you please list us as being very happy to exchange Tampa Bay, Fla., agates, local shells, and fossils for material from other areas?

But we cannot enter into long drawn out correspondence. If anyone wants to contact us and will state CLEARLY and DISTINCTLY what they have to trade, including shipping weights, and what they want in exchange, then perhaps we can cooperate.

The Science Center
William Guild, Director
P.O. Box 1118
St. Petersburg 1, Fla.

Is there a round robin pebble club?

Editor R&M:

I am 9 years old and have been a pebble pup for about a year. I have about 100 different rocks and minerals, mostly from Michigan.

As far as I can find out, there are no rock clubs in my vicinity open to children. But I think it would be fun to talk or write to others my age in this hobby. Have other children written you about this? I wonder if perhaps you know of a sort of "round robin pebble club" or something?

Valerie Potts
2538 Reese Drive
Niles, Mich.

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Cut turquoise

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Matrix Second grade, blue	25 cents per carat
Plain blue, small round, 2, 3, and 4 mm	5 cents each piece
Plain blue, large pieces	from $10 to $1,000 each piece

All turquoise will be sent by airmail or parcel post, no remittance to Iran is necessary, kindly pay to our account in Manufacturers Trust Co., New York, N.Y.

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Faceted Gem Special: 12 Stones postpaid $6.75 Here's what you get: 1 each 4-4½mm Orangey Blue and White Siam Zircons; an approx. ¾ Ct. Arizona Peridot, a 7 to 8mm Brilliant cut Rio Topaz Citrine and Natural Yellow Citrine; a 1½ to 2 Carat Red Garnet; a 12x16mm Smoky Quartz; a pair of 8mm Brilliant cut Rock Crystals; an 8 to 10mm Faceted Mexican Hematite, and a huge 18x25 Emerald cut Rock Crystal plus 2 rough Opals to cut and current price listings. Price list without order sent for 4¢ stamp.

DON L. JACKSON

P.O. Box 458, Claypool, Arizona

Phone Globe, GA 5-5868

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